

**APPENDIX A**  
**COSTS OF ALTERNATIVE AFFORDABILITY REQUIREMENTS**  
**CITY OF LONG BEACH**  
**INCLUSIONARY HOUSING ECONOMIC ANALYSIS**

June 13, 2003

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## **City of Long Beach Costs of Alternative Affordability Requirements**

### **A. Executive Summary**

The City of Long Beach retained David Paul Rosen & Associates (DRA) to prepare an economic analysis of potential inclusionary housing requirements for new residential development in Long Beach. As part of this analysis, DRA analyzed the estimated costs to developers of complying with alternative affordability requirements. These costs were estimated using an “affordability gap” methodology that determines the difference between the supportable mortgage on the unit at affordable rents and sales prices and the actual development cost of the unit.

The first step in the gap analysis establishes the amount a tenant or homebuyer can afford to contribute to the cost of renting or owning a dwelling unit based on established State and federal standards. Income levels, housing costs and rents used in the analysis are defined below using 2003 published data for Long Beach.

The second step estimates the costs of new housing construction in Long Beach. For this purpose, DRA in collaboration with City staff, formulated six prototypical housing developments (two rental developments and four owner developments) suitable for the Long Beach market of today. DRA estimated the cost to develop these housing prototypes in Long Beach under current housing conditions using RS Means data and information on actual recent housing development provided by Long Beach and Los Angeles area developers.

The third step in the gap analysis establishes the housing expenses borne by the tenants and owners. These costs can be categorized into operating costs, and financing or mortgage obligations. Operating costs are the maintenance expenses of the unit, including utilities, property maintenance, property taxes, management fees, property insurance, replacement reserves, and insurance. For the rental prototypes examined in this analysis, DRA assumed that the landlord pays all but certain tenant-paid utilities as an annual operating cost of the unit paid from rental income. For owner prototypes, DRA assumed the homebuyer pays all operating and maintenance costs for the home.

Financing or mortgage obligations are the costs associated with the purchase or development of the housing unit itself. These costs occur when all or a portion of the development cost is financed. This cost is always an obligation of the landlord or owner. Supportable financing is deducted from the total development cost, less any owner equity, to determine the gap between the supportable mortgage on the inclusionary units and the cost of developing those units.

For rental housing prototypes, the gap analysis calculates the difference between total development costs and the conventional mortgage supportable by net operating income

from restricted rents. For owners, the gap is the difference between development costs and the supportable mortgage plus the buyer's down payment.

### **1. Cost of Alternative Inclusionary Housing Requirements**

DRA estimated the affordability gap cost of alternative inclusionary housing requirements using the six housing prototypes. DRA modeled three alternative inclusionary requirements for the renter and owner prototypes, summarized in **Table A-1** below.

**Table A-1**  
**Alternative Inclusionary Housing Requirements**  
**City of Long Beach Inclusionary Housing Study**

#### **Renter**

1. 10% of units @ 45% AMI
2. 10% of units @ 60% AMI
3. 15% of units @ 60% AMI

#### **Owner**

1. 10% of units @ 90% AMI
2. 15% of units @ 90% AMI
3. 20% of units @ 90% AMI

The findings of the gap analysis are summarized in **Table A-2** for the rental prototypes and **Table A-3** for the owner prototypes

## **B. Housing Prototypes**

**Tables A-4** and **A-5** describe the rental and owner housing prototypes, respectively, examined in the gap analysis. These prototypes were developed in collaboration with City staff based on a review of recently constructed and planned residential developments. The prototypes are designed to represent typical market-rate rental and owner housing developments in Long Beach in terms of the resident population, product and construction type, density, number of units, unit mix by bedroom count, and unit size.

**Table A-2**  
**Affordability Gap on Inclusionary Units**  
**Rental Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

<b>Prototype</b>	<b>Renter 1</b> Townhomes	<b>Renter 2</b> Type V Stacked Flats Apartments
<b>Total Units</b>	22	50
<b>Inclusionary Units, Alternative 1:</b>	2	5
45% of Median 10.0%	2	5
60% of Median 0.0%	0	0
<b>Net Operating Income, Affordable Units (1)</b>	\$3,635	\$11,875
<b>Supportable Mortgage, Affordable Units (2)</b>	\$33,024	\$107,891
<b>Development Costs, Affordable Units</b>	\$388,784	\$817,448
<b>Total Affordability Gap, Includ. Units</b>	\$355,760	\$709,557
<b>Average Afford. Gap per Unit (All Units)</b>	\$16,171	\$14,191
<b>Inclusionary Units, Alternative 2:</b>	2	5
45% of Median 0.0%	0	0
60% of Median 10.0%	2	5
<b>Net Operating Income, Affordable Units (1)</b>	\$8,058	\$24,062
<b>Supportable Mortgage, Affordable Units (2)</b>	\$73,211	\$218,618
<b>Development Costs, Affordable Units</b>	\$388,784	\$817,448
<b>Total Affordability Gap, Includ. Units</b>	\$315,573	\$598,830
<b>Average Afford. Gap per Unit (All Units)</b>	\$14,344	\$11,977
<b>Inclusionary Units, Alternative 3:</b>	3	7
45% of Median 0.0%	0	0
60% of Median 15.0%	3	7
<b>Net Operating Income, Affordable Units (1)</b>	\$14,176	\$35,109
<b>Supportable Mortgage, Affordable Units (2)</b>	\$128,800	\$318,988
<b>Development Costs, Affordable Units</b>	\$588,716	\$1,162,167
<b>Total Affordability Gap, Includ. Units</b>	\$459,916	\$843,179
<b>Average Afford. Gap per Unit (All Units)</b>	\$20,905	\$16,864

(1) Based on income limits and affordable housing cost expense from Table 8; 2003 HUD utility allowances from the Long Beach Housing Authority including natural gas cooking, heating and water heating, and basic electricity; annual operating cost of \$2,600 per unit; property taxes at 1.20%; annual replacement reserve of \$250 per unit; 3% vacancy rate.

Source: David Paul Rosen & Associates



**Table A-3**  
**Affordability Gap on Inclusionary Units**  
**Owner Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

Prototype		Owner 1 S-F Detached	Owner 2 Townhomes	Owner 3 Type V Stacked Flat Condos	Owner 4 Type I High- Rise Condos
<b>Total Units</b>		10	22	50	100
<b>Inclusionary Units, Scenario 1:</b>		1	2	5	10
90% of Median	10.0%	1	2	5	10
<b>Supportable Mortgages, Afford. Units (1)</b>		\$165,761	\$307,704	\$702,619	\$1,405,238
<b>Plus: Downpayments @:</b>	10.0%	\$18,418	\$34,189	\$78,069	\$156,138
<b>Total Sales Inc., Afford. Units</b>		\$184,179	\$341,894	\$780,688	\$1,561,376
<b>Development Costs, Affordable Units</b>		\$279,605	\$491,176	\$994,841	\$3,292,029
<b>Total Affordability Gap, Inlus. Units</b>		\$95,426	\$149,282	\$214,153	\$1,730,653
<b>Average Afford. Cost (Net Income) per Unit (All Units)</b>		\$9,543	\$6,786	\$4,283	\$17,307
<b>Inclusionary Units, Scenario 2:</b>		1	3	7	15
90% of Median	15.0%	1	3	7	15
<b>Supportable Mortgages, Afford. Units (1)</b>		\$165,761	\$449,647	\$986,506	\$2,053,125
<b>Plus: Downpayments @:</b>	10.0%	\$18,418	\$49,961	\$109,612	\$228,125
<b>Total Sales Inc., Afford. Units</b>		\$184,179	\$499,608	\$1,096,118	\$2,281,250
<b>Development Costs, Affordable Units</b>		\$279,605	\$725,734	\$1,397,871	\$4,791,367
<b>Total Affordability Gap, Inlus. Units</b>		\$95,426	\$226,126	\$301,753	\$2,510,116
<b>Average Afford. Cost (Net Income) per Unit (All Units)</b>		\$9,543	\$10,278	\$6,035	\$25,101
<b>Inclusionary Units, Scenario 3:</b>		2	4	10	20
90% of Median	20.0%	2	4	10	20
<b>Supportable Mortgages, Afford. Units (1)</b>		\$307,704	\$591,591	\$1,436,153	\$2,810,477
<b>Plus: Downpayments @:</b>	10.0%	\$34,189	\$65,732	\$159,573	\$312,275
<b>Total Sales Inc., Afford. Units</b>		\$341,894	\$657,323	\$1,595,726	\$3,122,752
<b>Development Costs, Affordable Units</b>		\$544,436	\$960,292	\$2,026,709	\$6,584,057
<b>Total Affordability Gap, Inlus. Units</b>		\$202,543	\$302,969	\$430,983	\$3,461,305
<b>Average Afford. Cost (Net Income) per Unit (All Units)</b>		\$20,254	\$13,771	\$8,620	\$34,613

(1) Based on income limits and affordable housing cost expense from Table 8; mortgage interest rate of 7.5 percent and 30-year term; 2003 HUD utility allowances from the Long Beach Housing Authority including natural gas cooking, heating and water heating, basic electricity, trash, water and sewer; HOA/maintenance expense of \$100/month; property insurance expense of \$50/month; property taxes at 1.20 percent of affordable mortgage.

Source: David Paul Rosen & Associates.

**Table A-4**  
**Rental Housing Prototype Projects**  
**Long Beach Inclusionary Housing Analysis**

	Renter 1	Renter 2
<b>PROTOTYPE</b>	Townhomes	Type V Stacked Flats Apartments
<b>Total Unit Count</b>	22 Units	50 Units
<b>Zoning</b>	R-3-T	R-4-R, R-4-N
<b>FAR</b>	0.64	1.76
<b>Resident Population</b>	Family	Family
<b>Product Type</b>	Townhomes 2 Stories	Stacked Flats 5 Stories
<b>Construction Type</b>	Type V	Type V
<b>Density (DU's/Acre)</b>	25	70
<b>Land Area (Acres)</b>	0.88 Acres	0.71 Acres
<b>Units by BR Count</b>		
<b>One Bedroom</b>	4	7
<b>Two Bedroom/1 Bath</b>	3	8
<b>Two Bedroom/2 Bath</b>	11	25
<b>Three Bedroom</b>	4	10
<b>Unit Size (Net SF)</b>		
<b>One Bedroom</b>	900	800
<b>Two Bedroom/1 Bath</b>	950	950
<b>Two Bedroom/2 Bath</b>	1,000	1,000
<b>Three Bedroom</b>	1,200	1,100
<b>Average</b>	<i>1,011</i>	<i>984</i>
<b>Building Square Feet</b>		
<b>Net Living Area</b>	22,250	49,200
<b>Type of Parking</b>	1 Level Semi-Subterranean 7,508 SF 28 Standard 27 Compact	1 Level Subterranean (1) 15,441 SF 57 Standard 56 Compact
<b>No. of Parking Spaces</b>	55	113

(1) Plus 1 ground level parking.

Source: David Paul Rosen & Associates

**Table A-5  
Owner Housing Prototype Projects  
Long Beach Inclusionary Housing Analysis**

<b>PROTOTYPE</b>	<b>Owner 1</b>	<b>Owner 2</b>	<b>Owner 3</b>	<b>Owner 4</b>
	Small Lot S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High- Rise Condos
<b>Total Unit Count</b>	10 Units	22 Units	50 Units	100 Units
<b>Zoning</b>	R-1-M, R-1-S, R-1-T	R-3-T	R-4-R, R-4-N	R-4-U
<b>FAR</b>	0.44	0.75	1.98	2.94
<b>Resident Population</b>	Family	Family	Family	Family
<b>Product Type</b>	SFD 2 Story, PUD	Townhomes 2 Stories	Stacked Flats 5 Stories	Stacked Flats, 9 Stories
<b>Construction Type</b>	Type V with Garages	Type V with Covered parking	Type V over Podium Parking	Type I over Underground Parking
<b>Density (DU's/Acre)</b>	15	25	70	100
<b>Net Site Area (Acres)</b>	0.67 Acres	0.88 Acres	0.71 Acres	1.00 Acres
<b>Streets, etc @ % of Gross</b>	20.00%	0.00%	0.00%	0.00%
<b>Gross Site Area</b>	0.838 Acres	0.880 Acres	0.710 Acres	1.000 Acres
<b>Units by BR Count</b>				
Lofts	0	0	0	10
One Bedroom	0	0	7	10
Two Bedroom/1 Bath	0	13	8	10
Two Bedroom/2 Bath	4	0	25	50
Three Bedroom	6	9	10	20
<b>Unit Size (Net SF)</b>				
Lofts	0	0	0	800
One Bedroom	0	0	800	800
Two Bedroom/1 Bath	0	1,100	1,000	1,000
Two Bedroom/2 Bath	1,150	0	1,100	1,100
Three Bedroom	1,350	1,300	1,400	1,400
Four Bedroom	0	0	0	0
Manager's	0	0	0	0
Ave. (Exclud. Mgr's)	1,270	1,182	1,102	1,090
<b>Building Square Feet</b>				
Net Living Area	12,700	26,000	55,100	109,000
<b>Type of Parking</b>	Attached Garages 4,000 SF 200 SF/Space	1 Level Semi-Subterranean 7,508 SF 28 Standard 27 Compact	1 Level Subterranean (1) 15,441 SF 57 Standard 56 Compact	2 Levels Subterranean (1) 30,724 SF 113 Standard 112 Compact
<b>No. of Parking Spaces</b>	20	55	113	225

(1) Plus 1 ground level parking.

Source: David Paul Rosen & Associates.

## **C. Financing Scenario, Target Income Levels and Affordable Housing Cost**

### **1. Financing Scenario**

DRA modeled the rental and owner housing prototypes under financing scenarios that do not incorporate leverage from alternative sources of public subsidy for affordable housing. Because of the limited availability of affordable housing subsidies, it is not possible to predict the ability of any particular affordable housing development to secure such subsidies. More importantly, the inclusionary housing analysis determines the net cost of any of compliance, without public subsidies. Such subsidies may be combined with BMR units to “buy down” affordability to incomes deeper than those required by the inclusionary housing set-aside obligation. Therefore, we model the gap created by the affordable housing set-aside requirement. This is initially done without regard to incentives and alternative compliance options the City may offer.

### **2. Target Income Levels**

The gap analysis analyzes very low, low, and moderate income limits as commonly defined by HUD, California Redevelopment Law, California Housing Element law, and most affordable housing assistance programs. Very low income households are defined as households at 50 percent of area median income or below. Low income households are defined as households from 51 percent of area median income to 80 percent of area median income. Moderate income households are defined as households with incomes between 81 percent and 120 percent of area median income.

HUD reports a median family income of \$50,300 for the Los Angeles-Long Beach MSA for 2003. In establishing its income limits, HUD begins by calculating very low income limits as 50 percent of area median income. However, in high housing cost areas, the very low income limit is increased based on a formula incorporating Section 8 fair market rents for a two-bedroom unit. This adjusts income limits upward for areas where rental housing costs are unusually high in relation to the median income. This is what occurred in Los Angeles in 2003. HUD’s 2003 very low income limit in LA for a family of four is \$28,200. HUD further establishes its other income limits proportionally to the very low income limits. We have used this same convention in determining income limits for the inclusionary housing analysis, by basing them off of the very low income limits, adjusted by household size.

### **3. Affordable Housing Cost Definitions**

Calculation of the affordability gap requires defining affordable housing expense for renters and owners. **Table A-6** shows the affordable housing cost definitions and income levels developed for this analysis based on discussions with City staff:

**Table A-6**  
**Affordable Housing Cost Definitions**  
**City of Long Beach Inclusionary Housing Study**

Income Level of Occupants	Type of Housing	
	Rental	Ownership
Very low income (50% of median and below)	30% of 45% AMI	Not Analyzed
Low income (51-80% of median)	30% of 60% AMI	Not Analyzed
Moderate income (81-120% of median)	Not Analyzed	35% of 90% AMI

#### **4.      Occupancy Standards**

Because income definitions for affordable housing assistance programs vary by household size, calculation of affordable rents requires the definition of occupancy standards (the number of persons per unit) for each unit size. For the purposes of this analysis, affordable housing costs are calculated based on an occupancy standard of two persons per bedroom. For example, an occupancy of four persons is assumed for a two-bedroom unit.

#### **5.      Utility Allowances**

Allowable affordable net rents are calculated by subtracting allowances for the utilities paid directly by the tenants from the gross rent (or affordable housing cost). For owners, the affordable mortgage principal and interest payment is calculated by determining the affordable housing cost and deducting costs for taxes, property insurance, utilities, homeowner association dues and maintenance expense.

For purposes of the gap analysis, we incorporated June, 2002 utility allowances provided by the Long Beach Housing Authority, summarized in **Table A-7** below. The rental gap analysis assumes that the resident pays utilities for gas heating, cooking and water heating and for basic electricity, assuming the landlord pays for trash, water and sewer.

The owner gap analysis assumes utility allowances for gas heating, cooking and water heating, basic electricity, trash, water and sewer.

Actual utility allowances depend upon a variety of factors, including the utilities that are paid by the residents (e.g. water, gas, electricity, sewer, trash), the type of appliances and

heating units incorporated in the units, and whether appliances and heating units require electricity or gas.

**Table A-7**  
**Current HUD-Approved Monthly Utility Allowances**  
**City of Long Beach**

<u>Bedroom Size</u>	<u>Utility Allowance</u>	
	<u>Renters<sup>1</sup></u>	<u>Owners<sup>2</sup></u>
1 Bedroom	\$55	\$84
2 Bedroom	\$79	\$116
3 Bedroom	\$107	\$150
4 Bedroom	\$126	\$177

Source: Long Beach Housing Authority, effective June 3, 2002.

## **6. Affordable Net Rents and Owner Housing Expense**

**Table A-8** summarizes the affordable net rents used in the renter gap analyses. **Table A-9** summarizes the affordable housing costs used in the owner gap analyses.

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<sup>1</sup> For renters, includes gas heating, cooking, water heating and basic electricity. Assumes landlord pays trash, water and sewer.

<sup>2</sup> For owners, includes gas heating, cooking, water heating, basic electricity, trash, water and sewer.

**Table A-8**  
**Affordable Net Rents<sup>1</sup>**  
**Long Beach Inclusionary Housing Analysis**  
**2003**

Unit Size (No. of Bedrooms)	Very Low 45% AMI	Low 60% AMI
1 Bedroom	\$453	\$622
2 Bedroom	\$556	\$767
3 Bedroom	\$629	\$874

**Table A-9**  
**Affordable Owner Housing Cost <sup>1</sup>**  
**Long Beach Inclusionary Housing Analysis**  
**2003**

Unit Size (No. of Bedrooms)	Moderate 90% AMI
1 Bedroom	\$1,157
2 Bedrooms	\$1,446
3 Bedrooms	\$1,678

<sup>1</sup> U.S. Department of Housing and Urban Development published very low 2003 income limits, adjusted proportionally for 45% and 60% of percentage of area median income categories. Cross rents are calculated assuming an occupancy standard of two persons per bedroom. Net rents are calculated by deducting the utility allowances from Table A-7.

<sup>1</sup> California Department of Housing and Community Development published 2003 median income limits, adjusted proportionally for 90% of percentage of area median income category. Cross rents and owner affordable housing costs are calculated assuming an occupancy standard of two persons per bedroom.

## D. Development Costs

Land acquisition costs are based on an extensive review of land sales comparables in the City of Long Beach over the past five years. Hard construction costs are based on interviews with Long Beach area housing developers and 2002 data from RS Means, as described below. Other development costs were estimated based on interviews with local developers and DRA's extensive experience with housing development throughout Southern California.

### 1. Land Acquisition Costs

DRA reviewed vacant residential land sales comparables for the City of Long Beach for sales between 1998 and February, 2003. The source of the land sales data is Dataquick Information Services, an on-line data source that provides sales price data recorded by the County assessor's office. **Table A-10** lists the land sales comparables by residential zoning category. Land sales comparables were first sorted by zoning category and then by land sales prices per square foot of site area within each category. The land sales comparables examined for this analysis revealed a wide variation in per square foot land prices of \$4 to \$370 per square foot, with a median sales price of about \$39 per square foot. Many of the parcels are very small in size, and the sales may represent developer/landowner attempts to consolidate larger parcels.

DRA also examined available appraisals and land value estimate studies for vacant land with residential and planned development (PD) zoning in the City provided by City staff. These data, summarized in **Table A-11**, indicate a narrower range of residential land values of \$10 per square foot to \$30 per square foot, with a median value of \$19 per square foot.

For the purposes of the affordability gap analysis, DRA assumed a typical land cost of \$25 per square foot, which is the median of the 76 total land sales and appraised land values examined, as shown in **Table A-12**.



**Table A-10**  
**Sales Comparables by Zoning Category**  
**Vacant Land with Residential and Planned Development Zoning**  
**January 1, 1998 - February 1, 2003**

No.	Zip Code	Address	Parcel No.	Sale Date	Zoning	Total Sales Price	Lot Size (Sq. Ft.)	Price Per Sq. Ft.
<b>Sites With R-1 Zoning</b>								
1	90803	111 Cordova Walk	7243-011-023	11/5/98	R1S	\$435,000	2,600	\$167.31
2	90805	120 W. 67th Way	7304-029-009	1/6/99	R1N	\$355,000	6,650	\$53.38
3	90806	1216 E. Smith Pl.	7210-040-026	3/19/99	R1M	\$15,000	2,317	\$6.47
4	90806	719 W. 21st St.	7202-036-027	3/31/99	R1N	\$196,000	1,900	\$103.16
5	90805	42 E. Ellist St.	7126-026-012	10/3/00	R1N	\$35,000	4,060	\$8.62
6	90803	5545 E. Sorrento Dr.	7244-007-025	11/1/00	R1S	\$950,000	3,360	\$282.74
7	90814	349 Ultimo Ave.	7246-018-013	11/14/00	R1N	\$260,000	6,500	\$40.00
8	90806	635 E. Hill St.	7211-012-029	11/30/00	R1N	\$65,000	5,249	\$12.38
9	90803	5569 E. Vesuvian Walk	7244-018-016	12/8/00	R1S	\$300,000	4,546	\$65.99
10	90814	306 Ultimo Ave.	7246-024-015	2/8/02	R1	\$600,000	4,100	\$146.34
11	90805	6954 Orcutt Ave.	7304-002-017	3/5/02	R1M	\$182,500	5,925	\$30.80
12	90806	2086 Lewis Ave.	7210-022-003	3/13/02	R1N	\$52,500	5,300	\$9.91
13	90810	1847 W. Cameron St.	7317-005-015	8/22/02	R1N	\$239,000	2,997	\$79.75
14	90814	4827 E. Colorado St.	7250-022-017	9/11/02	R1N	\$425,000	9,650	\$44.04
15	90806	1210 E. Leigh Ct.	7210-041-006	9/24/02	R1M	\$40,000	2,320	\$17.24
16	90806	711 W. 31st St.	7203-013-017	1/31/03	R1	\$420,000	4,950	\$84.85
			Bottom of Range					\$6.47
			Top of Range					\$282.74
			Median					\$48.71
<b>Sites With R-2 Zoning</b>								
17	90803	6715 E. Seaside Walk	7245-029-003	9/9/99	R2	\$639,500	4,707	\$135.86
18	90804	1353 Loma Ave.	7259-011-027	7/26/01	R2N	\$565,000	6,747	\$83.74
19	90813	1466 Gaviota Ave.	7261-015-006	11/29/01	R2N	\$69,000	6,499	\$10.62
20	90807	3848 Myrtle Ave.	7130-027-010	12/28/01	R2N	\$445,000	1,200	\$370.83
21	90803	3015 E. Corto Pl.	7264-005-027	3/21/02	R23S	\$208,500	7,500	\$27.80
22	90804	1332 Stanley Ave.	7260-024-016	11/19/02	R2N	\$360,000	6,098	\$59.04
23	90806	1816 Henderson Ave.	7209-028-021	1/16/03	R2N	\$75,000	7,500	\$10.00
			Bottom of Range					\$10.00
			Top of Range					\$370.83
			Median					\$59.04
<b>Sites With R-3 Zoning</b>								
24	90806	2292 Lewis Ave.	7211-017-001	11/19/02	R3-4	\$390,000	1,969	\$198.07
<b>Sites With R-4 Zoning</b>								
25	90802	1011 E. 6th St.	7266-006-029	3/6/98	R4N	\$225,000	6,747	\$33.35
26	90802	1021 E. 6th St.	7266-006-030	3/20/98	R4N	\$155,000	6,747	\$22.97
27	90803	4545 E. 10th St.	7241-012-015	5/7/99	R4N	\$220,272	5,415	\$40.68
28	90813	919 Alamos Ave.	7274-023-016	11/29/99	R4N	\$189,500	6,974	\$27.17
29	90813	1593/1643 Pacific Ave. (1)	7269-002-019	4/4/01	R4N	\$699,000	52,494	\$13.32
30	90813	1049 Martin Luther King Jr. Ave.	7274-010-027	8/2/01	R4R	\$300,000	6,499	\$46.16
31	90807	3526 Linden Ave.	7145-013-006	3/28/02	R4	\$612,500	12,946	\$47.31
32	90803	4515 E. Ocean Blvd.	7256-034-027	4/26/02	R4R	\$380,000	2,744	\$138.48
33	90813	1030 Lewis Ave.	7274-008-005	6/26/02	R4N	\$198,000	1,999	\$99.05
34	90813	1486 Henderson Ave.	7269-040-019	8/21/02	R4N	\$55,500	4,696	\$11.82
35	90813	1030 Myrtle Ave.	7274-010-011	9/18/02	R4R	\$99,000	6,500	\$15.23
36	90813	802 E. 10th St.	7274-022-009	9/25/02	R4R	\$30,000	3,123	\$9.61
37	90813	1019 E. 11th St.	7274-007-037	11/14/02	R4R	\$200,000	6,747	\$29.64
			Bottom of Range					\$9.61
			Top of Range					\$138.48
			Median					\$29.64

**Table A-10**  
**Sales Comparables by Zoning Category**  
**Vacant Land with Residential and Planned Development Zoning**  
**January 1, 1998 - February 1, 2003**

No.	Zip Code	Address	Parcel No.	Sale Date	Zoning	Total Sales Price	Lot Size (Sq. Ft.)	Price Per Sq. Ft.
<b>Sites With Planned Development Zoning</b>								
38	90802	245 N. Nylic Ct.	7278-019-010	6/30/98	PD30	\$50,000	1,550	\$32.26
39	90803	6400 E. Pacific Coast Hwy.	7242-011-005	7/15/98	PD1	\$9,900,000	462,607	\$21.40 *
40	90802	1000 E. Ocean Blvd.	7265-005-004	9/19/00	PD5	\$1,628,000	14,296	\$113.88 *
41	90803	62 62nd Place	7245-022-021	8/24/00	PD30	\$240,000	2,000	\$120.00
42	90813	624 E. 7th St.	7274-018-026	9/14/01	PD30	\$30,000	2,250	\$13.33
43	90802	333/345 W. 3rd St. (2)	7280-014-011	11/29/01	PDN	\$500,000	14,994	\$33.35
44	90814	313 Flint Ave. (3)	7246-025-008	12/18/01	PD1	\$554,000	42,250	\$13.11
45	90814	300 Ultimo Ave.	7246-025-015	1/11/02	PD1	\$555,000	3,250	\$170.77
46	90814	305 Flint Ave.	7246-025-018	2/8/02	PD1	\$510,000	3,250	\$156.92
47	90814	309 Flint Ave.	7246-025-029	3/14/02	PD1	\$556,500	3,250	\$171.23
48	90803	105 Kingfisher Ct.	7242-027-007	3/29/02	PD1	\$1,128,000	79,715	\$14.15
49	90814	345 Manila Ave. (4)	7246-026-036+	8/30/02	PD1	\$805,000	14,739	\$54.62 *
50	90802	1720 Bluff Pl.	7265-016-008	9/13/02	PD1	\$560,000	2,126	\$263.41
51	90813	224 E. 15th St.	7269-016-019	9/17/02	PD29	\$55,500	3,999	\$13.88
52	90813	200 E 14th St.	7269-015-028	1/6/03	PD 29	\$684,000	18,356	\$37.26
53	90813	441 17th St.	7269-021-025	1/17/03	PD29	\$50,000	11,548	\$4.33
54	90813	225 E. 12th St.	7273-003-013	1/29/03	PD29	\$115,000	8,500	\$13.53 *
			Bottom of Range					\$4.33
			Top of Range					\$263.41
			Median					\$33.35
<b>Total--All Residential Land Sales</b>			<b>Overall Median</b>					<b>\$38.63</b>

Footnotes:

\* Residential development planned/under construction on site based on City of Long Beach major projects list, December, 2002.

(1) Includes parcel numbers 7280-014-011,-012.

(2) Includes parcel numbers 7246-025-008,-010,-011,-012,-013,-014 and 7246-025-904,-905,-907 and 7246-026-010,-022,-023,-024.

(3) Includes parcel numbers 7269-002-019 and -029.

(4) Includes parcel numbers 7246-026-036,-037,-038,-043.

Source: Dataquick Information Systems; David Paul Rosen & Associates

**Table A-11**  
**Land Appraisal Market Comparables and Value Estimates**  
**Vacant Land with Residential and Planned Development Zoning**  
**City of Long Beach**  
**2002 and 2003**

No.	Location	Sale Date	Zoning	Total Sales Price/Value	Lot Size (Sq. Ft.)	Price Per Sq. Ft.
<b>Appraisal For: 1970 and 2085 Atlantic Ave. (1)</b>						
Market Comparables:						
1	E. Side Long Beach Blvd.; 40' N. of Esther St.	Aug-02	PD29	\$176,000	12,140	\$14.50
2	SEC Locust Ave./14th St.	Jun-02	PD29	\$684,000	51,230	\$13.35
	Estimate of Value, 2085 Atlantic Ave.		PD25	\$255,000	15,000	\$17.00
	Estimate of Value, 1970 Atlantic Ave.		PD25	\$96,000	6,000	\$16.00
<b>Appraisal For: 1865, 1908 and 1910 Long Beach Blvd. and 333 E. Dayman St.(2)</b>						
Market Comparables:						
1	1760 Long Beach Blvd.	6/28/02	PD	\$176,000	12,149	\$14.49
2	1517 Long Beach Blvd.	Listing	PD	\$239,968	14,998	\$16.00
3	2086 Lewis Avenue	3/13/02	R1	\$52,500	5,300	\$9.91
4	413 E. Sunset Street	5/10/02	R1	\$45,000	2,247	\$20.03
	Estimate of Value, 1908 and 1910 Long Beach Blvd.		PD29	\$200,000	13,500	\$14.81
	Estimate of Value, 1865 Long Beach Blvd. and 333 E. Dayman St.		PD29	\$750,000	43,650	\$17.18
<b>Land Value Study for Parcels in West Gateway District (3)</b>						
Parcels:						
1	N. Side of W. 3rd b/w Golden Ave. and Maine Ave.		PD30	\$945,000	47,250	\$20.00
2	N. Side of W. 3rd b/w Maine Ave. and Daisy Ave.		PD30	\$992,250	47,250	\$21.00
3	W. Side of Daisy Ave., S. of W. 4th St.		PD30	\$405,000	22,500	\$18.00
4	E. Side of Daisy Ave., S. of W. 4th St.		PD30	\$540,000	30,000	\$18.00
5	E. Side of Daisy Ave., N. of W. 3rd St.		PD30	\$345,000	15,000	\$23.00
6	NEC Magnolia Ave./W. 3rd St.		PD30	\$328,125	13,125	\$25.00
7	NWC Magnolia Ave./W. 3rd St.		PD30	\$803,400	30,900	\$26.00
8	NWC Chestnut Ave./W. 3rd St.		PD30	\$405,000	15,000	\$27.00
9	B/w Maine Ave/Daisy Ave./W. 3rd St./W. Broadway		PD30	\$2,608,200	113,400	\$23.00
10	B/w Magnolia Ave/Daisy Ave./W. 3rd St./W. Broadway		PD30	\$2,937,600	122,400	\$24.00
11	B/w Magnolia Ave/Chestnut Ave./W. 3rd St./W. Broadway		PD30	\$2,782,000	111,280	\$25.00
12	NWC W. Broadway/Cedar Ave.		PD30	\$675,000	22,500	\$30.00
	Subtotal/Median			\$13,766,575	590,605	\$23.50
<b>Overall Median</b>						<b>\$19.00</b>

(1) Appraisal by R.P. Laurain & Associates, date of value March 28, 2003.

(2) Appraisal by Ryon Associates, date of value October 3, 2002.

(3) Land value study by R.P. Laurain & Associates, date of value March 1, 2002.

Source: City of Long Beach; David Paul Rosen & Associates

**Table A-12**  
**Sales Comparables and Appraised/Estimated Values**  
**Vacant Land with Residential and Planned Development Zoning**  
**City of Long Beach**  
**January 1, 1998 - February 1, 2003**

No.	Zip Code	Address	Parcel No.	Sale Date	Zoning	Total Sales Price	Lot Size (Sq. Ft.)	Price Per Sq. Ft.
1	90813	441 17th St.	7269-021-025	1/17/03	PD29	\$50,000	11,548	\$4.33
2	90806	1216 E. Smith Pl.	7210-040-026	3/19/99	R1M	\$15,000	2,317	\$6.47
3	90805	42 E. Ellist St.	7126-026-012	10/3/00	R1N	\$35,000	4,060	\$8.62
4	90813	802 E. 10th St.	7274-022-009	9/25/02	R4R	\$30,000	3,123	\$9.61
5	90806	2086 Lewis Ave.	7210-022-003	3/13/02	R1N	\$52,500	5,300	\$9.91
6		2086 Lewis Avenue		3/13/02	R1	\$52,500	5,300	\$9.91
7	90806	1816 Henderson Ave.	7209-028-021	1/16/03	R2N	\$75,000	7,500	\$10.00
8	90813	1466 Gaviota Ave.	7261-015-006	11/29/01	R2N	\$69,000	6,499	\$10.62
9	90813	1486 Henderson Ave.	7269-040-019	8/21/02	R4N	\$55,500	4,696	\$11.82
10	90806	635 E. Hill St.	7211-012-029	11/30/00	R1N	\$65,000	5,249	\$12.38
11	90814	313 Flint Ave. (1)	7246-025-008	12/18/01	PD1	\$554,000	42,250	\$13.11
12	90813	1593/1643 Pacific Ave. (2)	7269-002-019	4/4/01	R4N	\$699,000	52,494	\$13.32
13	90813	624 E. 7th St.	7274-018-026	9/14/01	PD30	\$30,000	2,250	\$13.33
14		SEC Locust Ave./14th St.		Jun-02	PD29	\$684,000	51,230	\$13.35
15	90813	225 E. 12th St.	7273-003-013	1/29/03	PD29	\$115,000	8,500	\$13.53
16	90813	224 E. 15th St.	7269-016-019	9/17/02	PD29	\$55,500	3,999	\$13.88
17	90803	105 Kingfisher Ct.	7242-027-007	3/29/02	PD1	\$1,128,000	79,715	\$14.15
18		1760 Long Beach Blvd.		6/28/02	PD	\$176,000	12,149	\$14.49
19		E. Side Long Beach Blvd.; 40' N. of Esther St.		Aug-02	PD29	\$176,000	12,140	\$14.50
20		Estimate of Value, 1908 and 1910 Long Beach Blvd.			PD29	\$200,000	13,500	\$14.81
21	90813	1030 Myrtle Ave.	7274-010-011	9/18/02	R4R	\$99,000	6,500	\$15.23
22		Estimate of Value, 1970 Atlantic Ave.			PD25	\$96,000	6,000	\$16.00
23		1517 Long Beach Blvd.		Listing	PD	\$239,968	14,998	\$16.00
24		Estimate of Value, 2085 Atlantic Ave.			PD25	\$255,000	15,000	\$17.00
25		Estimate of Value, 1865 Long Beach Blvd. and 333 E. Dayman St.			PD29	\$750,000	43,650	\$17.18
26	90806	1210 E. Leigh Ct.	7210-041-006	9/24/02	R1M	\$40,000	2,320	\$17.24
27		W. Side of Daisy Ave., S. of W. 4th St.			PD30	\$405,000	22,500	\$18.00
28		E. Side of Daisy Ave., S. of W. 4th St.			PD30	\$540,000	30,000	\$18.00
29		N. Side of W. 3rd b/w Golden Ave. and Maine Ave.			PD30	\$945,000	47,250	\$20.00
30		413 E. Sunset Street		5/10/02	R1	\$45,000	2,247	\$20.03
31		N. Side of W. 3rd b/w Maine Ave. and Daisy Ave.			PD30	\$992,250	47,250	\$21.00
32	90803	6400 E. Pacific Coast Hwy.	7242-011-005	7/15/98	PD1	\$9,900,000	462,607	\$21.40
33	90802	1021 E. 6th St.	7266-006-030	3/20/98	R4N	\$155,000	6,747	\$22.97
34		E. Side of Daisy Ave., N. of W. 3rd St.			PD30	\$345,000	15,000	\$23.00
35		B/w Maine Ave/Daisy Ave./W. 3rd St./W. Broadway			PD30	\$2,608,200	113,400	\$23.00
36		B/w Magnolia Ave/Daisy Ave./W. 3rd St./W. Broadway			PD30	\$2,937,600	122,400	\$24.00
37		NEC Magnolia Ave./W. 3rd St.			PD30	\$328,125	13,125	\$25.00
38		B/w Magnolia Ave/Chestnut Ave./W. 3rd St./W. Broadway			PD30	\$2,782,000	111,280	\$25.00
39		NWC Magnolia Ave./W. 3rd St.			PD30	\$803,400	30,900	\$26.00
40		NWC Chestnut Ave./W. 3rd St.			PD30	\$405,000	15,000	\$27.00
41	90813	919 Alamitos Ave.	7274-023-016	11/29/99	R4N	\$189,500	6,974	\$27.17
42	90803	3015 E. Corto Pl.	7264-005-027	3/21/02	R23S	\$208,500	7,500	\$27.80
43	90813	1019 E. 11th St.	7274-007-037	11/14/02	R4R	\$200,000	6,747	\$29.64
44		NWC W. Broadway/Cedar Ave.			PD30	\$675,000	22,500	\$30.00
45	90805	6954 Orcutt Ave.	7304-002-017	3/5/02	R1M	\$182,500	5,925	\$30.80
46	90802	245 N. Nylic Ct.	7278-019-010	6/30/98	PD30	\$50,000	1,550	\$32.26
47	90802	333/345 W. 3rd St. (3)	7280-014-011	11/29/01	PDN	\$500,000	14,994	\$33.35
48	90802	1011 E. 6th St.	7266-006-029	3/6/98	R4N	\$225,000	6,747	\$33.35
49	90813	200 E 14th St.	7269-015-028	1/6/03	PD 29	\$684,000	18,356	\$37.26
50	90814	349 Ultimo Ave.	7246-018-013	11/14/00	R1N	\$260,000	6,500	\$40.00
51	90803	4545 E. 10th St.	7241-012-015	5/7/99	R4N	\$220,272	5,415	\$40.68
52	90814	4827 E. Colorado St.	7250-022-017	9/11/02	R1N	\$425,000	9,650	\$44.04
53	90813	1049 Martin Luther King Jr. Ave.	7274-010-027	8/2/01	R4R	\$300,000	6,499	\$46.16

**Table A-12**  
**Sales Comparables and Appraised/Estimated Values**  
**Vacant Land with Residential and Planned Development Zoning**  
**City of Long Beach**  
**January 1, 1998 - February 1, 2003**

No.	Zip Code	Address	Parcel No.	Sale Date	Zoning	Total Sales Price	Lot Size (Sq. Ft.)	Price Per Sq. Ft.
54	90807	3526 Linden Ave.	7145-013-006	3/28/02	R4	\$612,500	12,946	\$47.31
55	90805	120 W. 67th Way	7304-029-009	1/6/99	R1N	\$355,000	6,650	\$53.38
56	90814	345 Manila Ave. (4)	7246-026-036+	8/30/02	PD1	\$805,000	14,739	\$54.62
57	90804	1332 Stanley Ave.	7260-024-016	11/19/02	R2N	\$360,000	6,098	\$59.04
58	90803	5569 E. Vesuvian Walk	7244-018-016	12/8/00	R1S	\$300,000	4,546	\$65.99
59	90810	1847 W. Cameron St.	7317-005-015	8/22/02	R1N	\$239,000	2,997	\$79.75
60	90804	1353 Loma Ave.	7259-011-027	7/26/01	R2N	\$565,000	6,747	\$83.74
61	90806	711 W. 31st St.	7203-013-017	1/31/03	R1	\$420,000	4,950	\$84.85
62	90813	1030 Lewis Ave.	7274-008-005	6/26/02	R4N	\$198,000	1,999	\$99.05
63	90806	719 W. 21st St.	7202-036-027	3/31/99	R1N	\$196,000	1,900	\$103.16
64	90802	1000 E. Ocean Blvd.	7265-005-004	9/19/00	PD5	\$1,628,000	14,296	\$113.88
65	90803	62 62nd Place	7245-022-021	8/24/00	PD30	\$240,000	2,000	\$120.00
66	90803	6715 E. Seaside Walk	7245-029-003	9/9/99	R2	\$639,500	4,707	\$135.86
67	90803	4515 E. Ocean Blvd.	7256-034-027	4/26/02	R4R	\$380,000	2,744	\$138.48
68	90814	306 Ultimo Ave.	7246-024-015	2/8/02	R1	\$600,000	4,100	\$146.34
69	90814	305 Flint Ave.	7246-025-018	2/8/02	PD1	\$510,000	3,250	\$156.92
70	90803	111 Cordova Walk	7243-011-023	11/5/98	R1S	\$435,000	2,600	\$167.31
71	90814	300 Ultimo Ave.	7246-025-015	1/11/02	PD1	\$555,000	3,250	\$170.77
72	90814	309 Flint Ave.	7246-025-029	3/14/02	PD1	\$556,500	3,250	\$171.23
73	90806	2292 Lewis Ave.	7211-017-001	11/19/02	R3-4	\$390,000	1,969	\$198.07
74	90802	1720 Bluff Pl.	7265-016-008	9/13/02	PD1	\$560,000	2,126	\$263.41
75	90803	5545 E. Sorrento Dr.	7244-007-025	11/1/00	R1S	\$950,000	3,360	\$282.74
76	90807	3848 Myrtle Ave.	7130-027-010	12/28/01	R2N	\$445,000	1,200	\$370.83
Median of Bottom Third								\$13.33
Median of Middle Third								\$25.00
Median of TopThird								\$99.05
Overall Median								\$25.50

Footnotes:

- (1) Includes parcel numbers 7280-014-011,-012.
- (2) Includes parcel numbers 7246-025-008,-010,-011,-012,-013,-014 and 7246-025-904,-905,-907 and 7246-026-010,-022,-023,-024.
- (3) Includes parcel numbers 7269-002-019 and -029.
- (4) Includes parcel numbers 7246-026-036,-037,-038,-043.

Source: Dataquick Information Systems; Appraisals and Land Value Studies by R.P. Laurain and Ryon Associates in 2002 and 2003

## 2. Development Impact Fees

Development impact fees for new residential development in the City of Long Beach include school fees, building permit fees, sewer fees, transportation and improvement fees, parks and recreation fees, Bluff Parks access fees and Art in Public Places fees. Current fee levels and estimates obtained from the Building and Safety Department web site and City staff are summarized in **Table A-13** below.

**Table A-13**  
**Development Impact Fee Assumptions**  
**Long Beach Inclusionary Housing Analysis**  
**2002**

School fees:	\$2.14 per square foot
Building permit fee	\$903 plus \$4.30 per \$1,000 construction valuation
Building plan check fee	85% of building permit fee
NPDES permit fee	\$1.65 per \$1,000 construction valuation
NPDES plan check fee	85% of building permit fee
Sewer fees <sup>3</sup> :	\$727 per unit, one-bath units \$925 per unit, two-bath units
Transportation & Improvement Fee	\$1,125 per dwelling unit
Parks and Recreation Fee	\$2,660 per single-family dwelling unit \$2,070 per multi-family dwelling unit
Bluff Park Beach Access Fee	0.5% of construction value
Art in Public Places	1.0% of construction value

Source: Long Beach Department of Planning and Building, David Paul Rosen & Associates

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<sup>3</sup> Per unit fees estimated by DRA based on the City's fee of \$66.09 per equivalent fixture unit (EFU) and estimated EFU's derived from the City's sewer capacity worksheet.

### 3. Hard Construction Costs

Construction hard costs are based on data provided by local developers interviewed for this study. Hard costs include residential and parking hard costs expressed on a per gross square foot of residential building area. The per square foot hard construction cost assumptions used for each prototype are presented in **Table A-14**.

Based on interviews with local developers, construction costs for the single-family detached prototype are lower than for other prototypes. According to our research, a key reason for the differential is that single-family developers typically use smaller sub-contractors that are more competitive and charge lower prices. Many single-family developers also serve as their own general contractors, with significant savings in contractor profit and overhead.

**Table A-14**  
**Per Square Foot Hard Construction Cost Assumptions by Prototype**  
**Long Beach Inclusionary Housing Analysis**  
**2003**

<b>Owner #1 Single-Family Detached Infill</b>	<b>Owner #2 Townhomes</b>	<b>Owner #3 Type V High- Density Condos</b>	<b>Owner #4 Type I High- Rise Condos</b>
\$55	\$75	\$85	\$150
	<b>Renter #1 Townhomes</b>	<b>Renter #2 Type V High- Density Apts.</b>	
	\$70	\$80	

Source: DRA interviews of Long Beach area developers.

In developing the hard cost assumptions, DRA also reviewed 2002 data provided by RS Means for the housing types most closely resembling the renter and owner housing prototypes. However, our experience indicates that construction cost estimates obtained through interviews with local developers are more representative of actual construction costs in Long Beach, because the Means data is consistently “off” throughout the country.

#### **4. Estimated Total Prototype Development Cost**

Total development costs, as defined for the purposes of this report, equal the sum of the above categories of development costs plus soft costs, developer overhead and profit.

Minimum developer profit is estimated at 12 percent of development costs, based on input from Advisory Committee members and the Building Industry Association. This level is considered a baseline profit or “hurdle rate,” representing the minimum necessary for the deal to proceed. Developer overhead is estimated at 4 percent of total development costs. Developer overhead cost line items typically represent a larger percentage of costs on small projects than larger projects.

Per unit total development costs for the prototypes are summarized in **Table A-15** for the rental prototypes and **Table A-16** for the owner prototypes. **Table A-17** and **Table A-18** show the calculation of development impact fees for the renter and owner prototypes, respectively.



**Table A-15**  
**Estimated Prototype Development Costs**  
**Rental Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	<b>Renter 1</b>	<b>Renter 2</b>
	<b>Townhomes</b>	<b>Type V Stacked Flats Apartments</b>
Acres	0.880	0.714
Number of Units	22	50
Parking Spaces	55	113
Net Square Feet Living Area	22,250	49,200
Total Net Square Feet	22,250	49,200
Ratio Net/Gross SF	90%	90%
Total Gross Square Feet Building Area	24,722	54,667
LAND ACQUISITION (1)	\$958,320	\$777,546
LAND CARRYING COSTS (2)	\$14,375	\$11,663
SITE IMPROVEMENTS (3)	\$229,997	\$186,611
BUILDING SHELL (4)	\$1,730,540	\$4,373,360
HARD COST CONTINGENCY (5)	\$98,027	\$227,999
ARCH./ENG./CONSTR. SUPERVISION (6)	\$137,238	\$319,198
CITY BUILDING PERMIT FEES (7)	\$25,226	\$54,903
SCHOOL FEES (8)	\$47,615	\$105,288
SEWER CAPACITY FEES (9)	\$18,964	\$43,280
TRANSPORTATION AND IMPROVEMENT FEE (10)	\$24,750	\$56,250
PARKS AND RECREATION FEES (11)	\$45,540	\$103,500
BLUFF PARK BEACH ACCESS FEE (12)	\$11,048	\$24,529
ART IN PUBLIC PLACES FEE (13)	\$22,096	\$49,058
ALTA SURVEY (14)	\$3,000	\$3,000
ENVIRONMENTAL PHASE I (15)	\$7,500	\$7,500
SOILS TESTING (16)	\$10,000	\$10,000
CONSTRUCTION LOAN FEES (17)	\$33,047	\$61,894
CONSTRUCTION/LEASE-UP INTEREST (18)	\$173,496	\$324,941
PROPERTY INSURANCE (19)	\$11,763	\$27,360
PROPERTY TAXES DURING CONSTR. (20)	\$14,704	\$34,200
CONSTR. LOAN TITLE AND CLOSING (21)	\$15,000	\$15,000
APPRAISAL FEES (22)	\$7,000	\$10,000
LEGAL (23)	\$15,000	\$30,000
MARKET STUDY/CONSULTING (24)	\$25,000	\$25,000
MARKETING/LEASE-UP/START-UP (25)	\$22,000	\$50,000
DEVELOPER OVERHEAD (26)	\$176,250	\$330,099
DEVELOPER PROFIT (27)	\$528,749	\$990,297
<b>TOTAL PROJECT COSTS</b>	<b>\$4,406,245</b>	<b>\$8,252,475</b>
TOTAL COST PER UNIT	\$200,284	\$165,049
TOTAL COST PER SQUARE FOOT	\$178.23	\$150.96
<b>TOTAL COSTS, WITHOUT LAND</b>	<b>\$3,433,550</b>	<b>\$7,463,266</b>
TOTAL COST PER UNIT	\$156,070	\$149,265
TOTAL COST PER SQUARE FOOT	\$238.86	\$639.90

Source: David Paul Rosen & Associates

**Table A-16**  
**Estimated Prototype Development Costs**  
**Owner Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	<b>Owner 1 Small Lot S-F Detached</b>	<b>Owner 2 Townhomes</b>	<b>Owner 3 Type V Stacked Flat Condos</b>	<b>Owner 4 Type I High- Rise Condos</b>
Gross Site Area	0.838	0.880	0.710	1.000
Net Lot Area	0.670	0.880	0.710	1.000
No. of Units	10	22	50	100
Parking Spaces	20	55	113	225
Net Square Feet Living Area	12,700	26,000	55,100	109,000
Total Net Square Feet	12,700	26,000	55,100	109,000
Ratio Net/Gross SF	100%	90%	90%	85%
Total Gross Square Feet Building Area	12,700	28,889	61,222	128,235
LAND ACQUISITION COSTS (1)	\$912,038	\$958,320	\$773,190	\$1,089,000
LAND CARRYING COSTS (2)	\$10,944	\$14,375	\$13,917	\$19,602
SITE IMPROVEMENTS (3)	\$175,111	\$229,997	\$185,566	\$261,360
BUILDING SHELL HARD COSTS (4)	\$698,500	\$2,166,667	\$5,203,889	\$19,235,294
HARD COST CONTINGENCY (5)	\$43,681	\$119,833	\$269,473	\$974,833
ARCH./ENG./CONSTR. SUPERVISION (6)	\$26,208	\$71,900	\$161,684	\$584,900
CITY BUILDING PERMIT FEES (7)	\$14,890	\$32,550	\$67,829	\$135,374
SCHOOL FEES (8)	\$27,178	\$55,640	\$117,914	\$233,260
SEWER CAPACITY FEES (9)	\$9,250	\$17,776	\$43,280	\$86,560
TRANSPORT. AND IMPROVE. FEE (10)	\$11,250	\$24,750	\$56,250	\$112,500
PARKS AND RECREATION FEE (11)	\$26,600	\$45,540	\$103,500	\$207,000
BLUFF PARK BEACH ACCESS FEE (123)	\$6,353	\$14,375	\$30,400	\$61,082
ART IN PUBLIC PLACES FEE (13)	\$12,707	\$28,750	\$60,800	\$122,163
CONSTRUCTION LOAN FEES (14)	\$23,226	\$45,464	\$85,545	\$279,493
CONSTRUCTION INTEREST (15)	\$97,549	\$238,686	\$449,113	\$1,467,340
ENVIRONMENTAL PHASE I (16)	\$7,500	\$7,500	\$7,500	\$7,500
SOILS TESTING (17)	\$10,000	\$10,000	\$10,000	\$10,000
PROPERTY TAXES (18)	\$5,242	\$17,975	\$48,505	\$175,470
INSURANCE (19)	\$13,104	\$71,900	\$161,684	\$584,900
SALES COMMISSIONS (20)	\$27,325	\$53,487	\$100,642	\$328,816
SELLING/CLOSING COSTS (21)	\$136,624	\$267,436	\$503,208	\$1,644,079
DEVELOPER OVERHEAD (22)	\$109,299	\$213,949	\$402,566	\$1,315,263
DEVELOPER PROFIT (23)	\$327,897	\$641,846	\$1,207,698	\$3,945,789
<b>TOTAL PROJECT COST</b>	<b>\$2,732,476</b>	<b>\$5,348,716</b>	<b>\$10,064,152</b>	<b>\$32,881,577</b>
PER UNIT	\$273,248	\$243,123	\$201,283	\$328,816
PER SF	\$215.16	\$185.15	\$164.39	\$256.42
<b>TOTAL COST, EXCLUDING LAND</b>	<b>\$1,809,494</b>	<b>\$4,376,021</b>	<b>\$9,277,044</b>	<b>\$31,772,975</b>
PER UNIT	\$180,949	\$198,910	\$185,541	\$317,730
PER SF	\$142.48	\$151.48	\$151.53	\$247.77

**Table A-17**  
**Development Impact/Processing Fees**  
**Renter Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	Renter 1	Renter 2
	Townhomes	Type V Stacked Flats Apartments
<i>Total Net Square Feet Living Area</i>	22,250	49,200
<i>Total Gross Square Feet Residential Building Area</i>	24,722	54,667
<i>Total Gross Square Feet Garages</i>	7,508	15,441
<i>Total Units</i>	22	50
<i>Construction Value Per SF, Residential Building (1)</i>	\$82.00	\$82.00
<i>Construction Value Per SF, Garages (1)</i>	\$24.30	\$27.40
<i>Total Construction Value</i>	\$2,209,636	\$4,905,777
<b>City Building Permit Fees (2)</b>		
Total Permit Fee	\$25,226	\$54,903
<b>School Fees</b>		
Fee Per Net SF Living Area (3)	\$2.14	\$2.14
Total Permit Fee	\$47,615	\$105,288
<b>Sewer Fees (4)</b>		
<i>Number of Units by Bedroom Count</i>	<i>Total Units:</i>	
One Bedroom	22	50
Two Bedroom/One Bath	4	7
Two Bedroom/Two Bath	3	8
Three Bedroom	11	25
	4	10
<i>Est. Sewer Fees By Unit Bedroom Count</i>		
	<u>Est. EFU's</u>	<u>Fee Per Unit</u>
One Bedroom	11	\$727
Two Bedroom/One Bath	11	\$727
Two Bedroom/Two Bath	14	\$925
Three Bedroom	14	\$925
Total Sewer Fees	\$3,700	\$9,250
	\$18,964	\$43,280
<b>Transportation &amp; Improvement Fee</b>		
Per Unit Fee (5)	\$1,125	\$1,125
Total Fees	\$24,750	\$56,250
<b>Parks &amp; Rec. Fee</b>		
Per Unit Fee (6)	\$2,070	\$2,070
Total Fees	\$45,540	\$103,500
<b>Bluff Park Beach Access Fee</b>	0.5%	of constr. value
Total Fees	\$11,048	\$24,529
<b>Art in Public Places Fee</b>	1.0%	of constr. value
Total Fees	\$22,096	\$49,058
<b>Total Processing/ Impact Fees</b>	\$195,240	\$436,808
Total Fees Per Unit	\$8,875	\$8,736
Total Fees Per Net SF	\$8.77	\$8.88

- (1) From "Building Valuation Data" sheet, effective May 7, 2002, for "good" construction apartment buildings by construction type.
- (2) Includes plan check, building permit, NPDES permit and NPDES plan check fees.  
Building permit fee equals \$903 plus \$4.30 per \$1,000 valuation; plan check fee is 85% of building permit fee.  
NPDES permit fee equals \$1.65 per \$1,000 valuation; NPDES plan check fee is 85% of NPDES permit fee.
- (3) Source: City of Long Beach.
- (4) Fee is assessed at a rate of \$66.09 per "equivalent fixture unit" (EFU). Number of EFU's estimated by DRA using City's sewer capacity worksheet.
- (5) Source: City of Long Beach. Fee is \$664 per unit for senior housing or second units.
- (6) Source: City of Long Beach. Equals fee for multifamily units.
- Source: David Paul Rosen & Associates

**Table A-18**  
**Development Impact/Processing Fees**  
**Owner Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	Owner 1 Small Lot S-F Detached	Owner 2 Townhomes	Owner 3 Flat Condos	Owner 4 Type I High- Rise Condos
<i>Total Net Square Feet Living Area</i>	12,700	26,000	55,100	109,000
<i>Total Gross Square Feet Residential Buildings</i>	12,700	28,889	61,222	128,235
<i>Total Gross Square Feet Garages</i>	4,000	7,508	15,441	30,724
<i>Total Units</i>	10	22	50	100
<i>Construction Value Per SF, Residential Building (1)</i>	\$92.40	\$92.40	\$92.40	\$88.70
<i>Construction Value Per SF, Private Garages (1)</i>	\$24.30	\$27.40	\$27.40	\$27.40
<i>Total Construction Value</i>	\$1,270,680	\$2,875,039	\$6,080,017	\$12,216,308
<b>City Building Permit Fees (2)</b>				
Total Permit Fee	\$14,890	\$32,550	\$67,829	\$135,374
<b>School Fees</b>				
Fee Per Net SF Living Area (3)	\$2.14	\$2.14	\$2.14	\$2.14
Total Permit Fee	\$27,178	\$55,640	\$117,914	\$233,260
<b>Sewer Capacity Fees (4)</b>				
<i>Number of Units by Bedroom</i>				
<i>Count</i>	<i>Total Units:</i>			
Loft	10	22	50	100
One Bedroom	0	0	0	10
Two Bedroom/One Bath	0	0	7	10
Two Bedroom/Two Bath	0	13	8	10
Two Bedroom/Two Bath	4	0	25	50
Three Bedroom/Two Bath	6	9	10	20
<i>Est. Fees By Bedroom Count</i>	<i>Est. EFU's</i>	<i>Fee Per Unit</i>		
Loft	11	\$727	\$0	\$7,270
One Bedroom	11	\$727	\$0	\$7,270
Two Bedroom/One Bath	11	\$727	\$0	\$7,270
Two Bedroom/Two Bath	14	\$925	\$3,700	\$46,250
Three Bedroom/Two Bath	14	\$925	\$5,550	\$18,500
Total Sewer Fees			\$9,250	\$86,560
<b>Transportation &amp; Improvement Fee</b>				
Per Unit Fee (5)	\$1,125	\$1,125	\$1,125	\$1,125
Total Fees	\$11,250	\$24,750	\$56,250	\$112,500
<b>Parks &amp; Rec. Fee</b>				
Per Unit Fee (6)	\$2,660	\$2,070	\$2,070	\$2,070
Total Fees	\$26,600	\$45,540	\$103,500	\$207,000
<b>Bluff Park Beach Access Fee</b>				
0.5% of constr. value				
Total Fees	\$6,353	\$14,375	\$30,400	\$61,082
<b>Art in Public Places Fee</b>				
1.0% of constr. value				
Total Fees	\$12,707	\$28,750	\$60,800	\$122,163
<b>Total Processing/ Impact Fees</b>				
Total Fees Per Unit	\$10,823	\$9,972	\$9,599	\$9,579
Total Fees Per Net SF	\$8.52	\$8.44	\$8.71	\$8.79

- (1) From "Building Valuation Data" sheet, effective May 7, 2002, for "good" construction dwelling units by construction type.
- (2) Includes plan check, building permit, residential SMI tax and NPDES permit and NPDES plan check.  
Building permit fee equals \$903 plus \$4.30 per \$1,000 valuation; plan check fee is 85% of building permit fee.  
NPDES permit fee equals \$1.65 per \$1,000 valuation; NPDES plan check fee is 85% of NPDES permit fee.
- (3) Source: City of Long Beach.
- (4) Fee is assessed at a rate of \$66.09 per "equivalent fixture unit" (EFU). Number of EFU's estimated by DRA using City's sewer capacity worksheet.
- (5) Source: City of Long Beach.
- (6) Source: City of Long Beach. Equals fee for single-family units.  
Source: David Paul Rosen & Associates.

## **E. Operating and Financing Cost Assumptions**

### **1. General Operating Costs, Rental Prototypes**

Annual operating costs are estimated at \$2,700 per unit for the lowest density Rental Prototypes #1 and #2, and \$3,100 per unit for the remaining rental prototypes, excluding property taxes and capital/replacement reserves. These figures are based on weighted average annual operating costs per unit for 65 conventional rental properties comprising 9,038 units in the Long Beach metropolitan area, as reported by the Institute of Real Estate Management (IREM). The source of the IREM data is the 2001 Income/Expense Analysis, Conventional Properties. These operating costs are consistent with DRA experience with rental housing developments in the greater Long Beach area. DRA assumes annual property taxes at 1.2 percent of total development costs and annual replacement reserve fund deposits equal to 0.4 percent of hard construction costs.

A vacancy allowance of three percent for affordable units is deducted from rental income to compensate for the landlord's potential loss of rental income when units become unoccupied, particularly when tenants move before a new tenant is found.

Summaries of the net operating income generated under alternative household income scenarios are included in Attachment A.

### **2. Financing Costs**

Financing costs vary according to the amount of equity invested, the term of the loan, the annual interest, and, in the case of ownership projects, mortgage insurance rates. For purposes of this gap analysis, the amount of the first mortgage for the rental prototypes is assumed to be the amortized debt that may be supported by tenant net affordable rents. The balance of project financing is the affordability cost or gap.

With all prototypes, we assume a conventional construction loan during construction. The construction loan for the rental prototypes is calculated based on a loan-to-cost ratio of 75 percent and an average loan balance of 60 percent. DRA has assumed an 8.5 percent construction interest rate and a 1.0 percent construction loan fee. This interest rate is high by today's standard (around 6 percent). However, today's interest rate environment is historically low. To remain conservative in our assumptions we use the 8.5 percent competitive low rate throughout this analysis. The construction and lease-up period is assumed at 15 months for Renter Prototypes #1 and #2.

For the owner prototypes, the maximum supportable construction loan is calculated based on a loan-to-cost ratio of 85 percent and an average loan balance of 60 percent. DRA has assumed an 8.5 percent construction interest rate and a 1.0 percent construction loan fee. The construction and sales period is assumed at 15 months for Owner Prototypes #1 and

#2 and 18 months for Owner Prototypes #3 and #4. Based on the input of local developers, homes are generally phased and built as purchase reservations are received.

The interest rate assumptions, particularly construction interest rates, are high for the current market. However, interest rates are presently at historical lows and the inclusionary housing program would be in place under a variety of interest rate environments hence more conservative interest rates were used in the analysis.

For the owner prototypes, DRA assumed homebuyer mortgages based on an effective interest rate of 7.5 percent (combined loan interest and mortgage insurance where appropriate).

Development cost and financing assumptions for the renter and owner prototypes are summarized in **Table A-19** and **Table A-20**, respectively.

**Table A-19**  
**Development and Financing Cost Assumptions**  
**Rental Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	<b>Renter 1</b>	<b>Renter 2</b>
	<b>Townhomes</b>	<b>Type V Stacked Flats Apartments</b>
<b>Land/Building Acquisition Cost</b>		
Land Cost Per Gross SF Site Area	\$25.00	\$25.00
<b>Development Cost Assumptions</b>		
Site Improvement Costs per SF	\$6.00	\$6.00
Building Shell Costs per Unit	\$70.00	\$80.00
Hard Cost Contingency (1)	5.00%	5.00%
Architectural/Engineering (1)	7.00%	7.00%
Property Taxes During Construction (1)	0.60%	0.60%
Insurance During Construction (1)	1.00%	1.00%
Marketing/Leasing/Start-Up Per Unit	\$1,000	\$1,000
Developer Overhead (% TDC)	4.00%	4.00%
Developer Profit (% TDC)	12.00%	12.00%
<b>Construction Loan</b>		
Construction Loan As a % of TDC	75.00%	75.00%
Construction Loan Amount	\$3,304,684	\$6,189,356
Interest Rate	7.00%	7.00%
Loan Fees	1.00%	\$61,894
Average Loan Balance (Constr/Lease-Up)	60.00%	60.00%
Construction Period	12 Months	12 Months
Lease-Up Period	3 Months	3 Months
Total Construction Loan Term	15 Months	15 Months
Construction Loan Interest	\$173,496	\$324,941
<b>Permanent Loan</b>		
Debt Coverage Ratio	1.25	1.25
Mortgage Term	30 years	30 years
Interest Rate	8.00%	8.00%
<b>Land/Building Carrying Costs</b>		
Property Tax Rate	1.20%	1.20%
Holding Period	15 Months	15 Months
Land Carrying Costs	\$14,375	\$11,663

(1) As a percentage of direct costs (site improvements, parking structure and building shell hard costs).

Source: David Paul Rosen & Associates

**Table A-20**  
**Development and Financing Cost Assumptions**  
**Owner Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**

	Owner 1 Small Lot S-F Detached	Owner 2 Townhomes	Owner 3 Type V Stacked Flat Condos	Owner 4 Type I High- Rise Condos
<b>Land Acquisition Cost</b>				
Land Cost Per Gross SF Site Area	\$25.00	\$25.00	\$25.00	\$25.00
<b>Development Cost Assumptions</b>				
Site Improvement Costs per SF	\$6.00	\$6.00	\$6.00	\$6.00
Site Improvement Costs per Unit	\$17,511	\$10,454	\$3,711	\$2,614
Unit Hard Construction per SF	\$55.00	\$75.00	\$85.00	\$150.00
Hard Cost Contingency (1)	5%	5%	5%	5%
Architectural/Engineering (1)	3%	3%	3%	3%
Property Taxes During Construction (1)	0.60%	0.60%	0.60%	0.60%
Insurance During Construction (1)	1.50%	3.00%	3.00%	3.00%
Selling/Closing Costs (% TDC)	5.00%	5.00%	5.00%	5.00%
Sales Commissions (% TDC)	1.00%	1.00%	1.00%	1.00%
Developer Overhead/General Conditions (% TDC)	4.00%	4.00%	4.00%	4.00%
Developer Profit (% TDC)	12.00%	12.00%	12.00%	12.00%
<b>Construction Loan</b>				
Construction Loan % of TDC	85.00%	85.00%	85.00%	85.00%
Constr. Loan Amt.	\$2,322,605	\$4,546,408	\$8,554,529	\$27,949,341
Interest Rate	7.00%	7.00%	7.00%	7.00%
Loan Fees	1.00%	1.00%	1.00%	1.00%
Average Loan Balance--Construction	60.00%	60.00%	60.00%	60.00%
Construction Period	12 Months	15 Months	18 Months	18 Months
Total Construction Loan Interest	\$97,549	\$238,686	\$449,113	\$1,467,340
Construction Loan Points	\$23,226	\$45,464	\$85,545	\$279,493
<b>Land Carrying Costs</b>				
Property Tax Rate	1.20%	1.20%	1.20%	1.20%
Holding Period	12 Months	15 Months	18 Months	18 Months
Land Loan Interest	\$0	\$0	\$0	\$0
Land Carrying Costs	\$10,944	\$14,375	\$13,917	\$19,602

(1) As a percentage of direct costs (site improvements, parking structure and building shell hard costs).

Source: David Paul Rosen & Associates.



## **F. Estimated Costs of Alternative Affordability Requirements**

The estimated cost of complying with alternative affordability requirements is calculated by subtracting supportable debt (plus down payments for the owner prototype) from total development costs. This analysis is detailed in **Tables A-21** through **A-46** presented at the end of this section.

### **1. Development Costs of Affordable Units**

First, total prototype development costs were calculated on a per unit basis by bedroom unit. These calculations are shown by prototype unit in **Tables A-21** through **A-22** for the renter prototypes, and **Tables A-23** through **A-26** for the owner prototypes.

### **2. Income and Rent Assumptions**

Gross rents by income level, utility allowances, and net rents are shown in **Table A-27** for the renter prototypes based on the affordability standards, costs and financing assumptions described above.

### **3. Per Unit Affordable Mortgages**

Per unit affordable mortgages by income level are shown in **Table A-28** for the owner prototypes.

### **4. Cost of Alternative Affordability Standards**

The affordability cost was calculated for each of the three Alternative Affordability Standards described above.

#### **a. Renter Prototypes**

**Tables A-29** through **A-31** calculate the number of affordable units required for the renter prototypes by bedroom count and income level for Alternatives 1, 2 and 3, respectively.

**Tables A-32** through **A-34** calculate the gross rent and net operating income generated by the affordable rental units under Alternatives 1, 2 and 3, respectively.

**Tables A-35** through **A-37** calculate the combined development costs for the affordable rental units by bedroom count and income level under Alternatives 1, 2 and 3, respectively.

#### **b. Owner Prototypes**

**Tables A-38** through **A-40** calculate the number of affordable units required for the owner prototypes by bedroom count and income level under Alternatives 1, 2 and 3, respectively.

**Tables A-41** through **A-43** calculate the combined affordable mortgages of the owner units under Alternatives 1, 2 and 3, respectively.

**Tables A-44** through **A-46** calculate the total development costs of the affordable owner units under Alternatives 1, 2 and 3, respectively.

## **Attachment 1**

### **Land Sales Comparables Data and Analysis**

**Table A-21**  
**Per Unit Development Costs By Unit Bedroom Count**  
**Renter Prototype #1**  
**Long Beach Inclusionary Housing Analysis**

Prototype Description: Total Number of Units:	Townhomes 22 Units	TYPE AND SIZE OF UNIT			
		1BD/1BA 900 1,000 Total S.F. (1)	2BD/1BA 950 1,056 Total S.F. (1)	2BD/2BA 1,000 1,111 Total S.F. (1)	3BD/2BA 1,200 1,333 Total S.F. (1)
<b>Hard Construction Costs</b>					
Site Improvements	\$10,454 /DU	\$10,454	\$10,454	\$10,454	\$10,454
Parking/Unit Constr. Costs	\$70.00 Per SF	\$70,000	\$73,889	\$77,778	\$93,333
<b>Total Hard Costs</b>		\$80,454	\$84,343	\$88,232	\$103,788
<b>Building Permit, School and Sewer Fees</b>					
Building Permit	\$1.13/ Net S.F.	\$1,020	\$1,077	\$1,134	\$1,361
School Fees	\$2.14/ Net S.F.	\$1,926	\$2,033	\$2,140	\$2,568
Sewer Fees		\$727	\$2,181	\$5,816	\$925
<b>Subtotal</b>		\$3,673	\$5,291	\$9,090	\$4,854
<b>Other Fees and Indirect/Soft Costs</b>					
	\$30,737 /DU	\$30,737	\$30,737	\$30,737	\$30,737
<b>Total Costs (Except Land, Overhead, Profit)</b>		\$114,865	\$120,371	\$128,059	\$139,378
<b>Land Costs</b>					
	\$44,213 /DU	\$44,213	\$44,213	\$44,213	\$44,213
<b>Dev. Fee/Profit &amp; Overhead</b>					
	16%	\$30,301	\$31,349	\$32,814	\$34,970
<b>Total Project Costs</b>		\$186,651	\$193,113	\$202,133	\$215,414

(1) Assumes efficiency ratio (net/gross SF) of: 90%  
Source: David Paul Rosen & Associates

**Table A-22**  
**Per Unit Development Costs By Unit Bedroom Count**  
**Renter Prototype #2**  
**Long Beach Inclusionary Housing Analysis**

Prototype Description: Total Number of Units:	Type V Stacked Flats Apartments 50 Units	TYPE AND SIZE OF UNIT			
		1BD/1BA 800 889 Total S.F. (1)	2BD/1BA 950 1,056 Total S.F. (1)	2BD/2BA 1000 1,111 Total S.F. (1)	3BD/2BA 1100 1,222 Total S.F. (1)
<b>Hard Construction Costs</b>					
Site Improvements	\$3,732 /DU	\$3,732	\$3,732	\$3,732	\$3,732
Unit Construction Costs	\$80.00 Per SF	\$71,111	\$84,444	\$88,889	\$97,778
<b>Total Hard Costs</b>		\$74,843	\$88,177	\$92,621	\$101,510
<b>Building Permit, School and Sewer Fees</b>					
Building Permit	\$1.12/ Net S.F.	\$893	\$1,060	\$1,116	\$1,228
School Fees	\$2.14/ Net S.F.	\$1,712	\$2,033	\$2,140	\$2,354
Sewer Fees		\$727	\$727	\$925	\$925
<b>Subtotal</b>		\$3,332	\$3,820	\$4,181	\$4,507
<b>Other Fees and Indirect/Soft Costs</b>	\$27,589 /DU	\$27,589	\$27,589	\$27,589	\$27,589
<b>Total Costs (Except Land, Overhead, Profit)</b>		\$105,764	\$119,585	\$124,391	\$133,605
<b>Land Costs</b>	\$15,784 /DU	\$15,784	\$15,784	\$15,784	\$15,784
<b>Dev. Fee/Profit &amp; Overhead</b>	16%	\$23,152	\$25,785	\$26,700	\$28,455
<b>Total Project Costs</b>		\$144,700	\$161,154	\$166,875	\$177,844

(1) Assumes efficiency ratio (net/gross SF) of: 90%  
Plus pro rata (per unit) share of 0 of common space.  
Source: David Paul Rosen & Associates

**Table A-23**  
**PER UNIT PROTOTYPE DEVELOPMENT COSTS BY BEDROOM COUNT**  
**OWNER PROTOTYPE #1**  
**CITY OF LONG BEACH**

Prototype Description: Total Number of Units:	Small Lot S-F Detached 10 Units	TYPE AND SIZE OF UNIT	
		2BD/2BA 1,150 Net S.F. 1,150 Total S.F. (1)	3BD/2BA 1,350 Net S.F. 1,350 Total S.F. (1)
<b>Hard Construction Costs</b>			
Site Improvements	\$17,511 /DU	\$17,511	\$17,511
Unit/Parking Constr. Costs	\$58.44 /Gr. S.F.	\$67,205	\$78,893
<b>Total Hard Costs</b>		\$84,716	\$96,404
<b>Building Permit, School and Sewer Fees</b>			
Building Permit	\$1.47/ Net S.F.	\$1,689	\$1,983
School Fees	\$2.14/ Net S.F.	\$2,461	\$2,889
Sewer Fees		\$925	\$925
<b>Subtotal</b>		\$5,075	\$5,797
<b>Other Fees and Indirect/Soft Costs</b>			
	\$40,369 /DU	\$40,369	\$40,369
<b>Total Costs (Except Land and Overhead/Profit)</b>		\$130,160	\$142,570
<b>Land Costs</b>			
	\$92,298 /DU	\$92,298	\$92,298
<b>Dev. Fee/Profit &amp; Overhead</b>			
	16%	\$42,373	\$44,737
<b>Total Project Costs</b>		\$264,831	\$279,605

(1) Assumes efficiency ratio (net/gross SF) of: 100%  
Source: David Paul Rosen & Associates.

**Table A-24**  
**PER UNIT PROTOTYPE DEVELOPMENT COSTS BY BEDROOM COUNT**  
**OWNER PROTOTYPE #2**  
**CITY OF LONG BEACH**

Prototype Description: Total Number of Units:	Townhomes 22 Units	TYPE AND SIZE OF UNIT	
		2BD/1BA 1,100 Net S.F. 1,222 Total S.F. (1)	3BD/2BA 1,300 Net S.F. 1,444 Total S.F. (1)
<b>Hard Construction Costs</b>			
Site Improvements	\$10,454 /DU	\$10,454	\$10,454
Unit/Parking Constr. Costs	\$79.15 /Gr. S.F.	<u>\$96,737</u>	<u>\$114,325</u>
<b>Total Hard Costs</b>		\$107,191	\$124,779
<b>Building Permit, School and Sewer Fees</b>			
Building Permit	\$1.58/ Net S.F.	\$1,736	\$2,052
School Fees	\$2.14/ Net S.F.	\$2,354	\$2,782
Sewer Fees		<u>\$727</u>	<u>\$925</u>
<b>Subtotal</b>		\$4,817	\$5,759
<b>Other Fees and Indirect/Soft Costs</b>			
	\$40,807 /DU	\$40,807	\$40,807
<b>Total Costs (Except Land and Overhead/Profit)</b>		\$152,816	\$171,346
<b>Land Costs</b>			
	\$44,213 /DU	\$44,213	\$44,213
<b>Dev. Fee/Profit &amp; Overhead</b>			
	16%	\$37,529	\$41,059
<b>Total Project Costs</b>		\$234,558	\$256,618

(1) Assumes efficiency ratio (net/gross SF) of:  
Source: David Paul Rosen & Associates.

90%

**Table A-25**  
**PER UNIT PROTOTYPE DEVELOPMENT COSTS BY BEDROOM COUNT**  
**OWNER PROTOTYPE #3**  
**CITY OF LONG BEACH**

Prototype Description: Total Number of Units:	Type V Stacked Flat Condos 50 Units	TYPE AND SIZE OF UNIT			
		1BD/1BA 800 Net S.F. 889 Total S.F. (1)	2BD/1BA 1,000 Net S.F. 1,111 Total S.F. (1)	2BD/2BA 1,100 Net S.F. 1,222 Total S.F. (1)	3BD/2BA 1,400 Net S.F. 1,556 Total S.F. (1)
<b>Hard Construction Costs</b>					
Site Improvements	\$3,711 /DU	\$3,711	\$3,711	\$3,711	\$3,711
Unit/Parking Constr. Costs	\$89.40 /Gr. S.F.	\$79,468	\$99,335	\$109,269	\$139,069
<b>Total Hard Costs</b>		\$83,179	\$103,046	\$112,980	\$142,780
<b>Building Permit, School and Sewer Fees</b>					
Building Permit	\$1.54/ Net S.F.	\$1,233	\$1,541	\$1,695	\$2,158
School Fees	\$2.14/ Net S.F.	\$1,712	\$2,140	\$2,354	\$2,996
Sewer Fees		\$727	\$727	\$925	\$925
<b>Subtotal</b>		\$3,672	\$4,408	\$4,974	\$6,079
<b>Other Fees and Indirect/Soft Costs</b>	\$35,577 /DU	\$35,577	\$35,577	\$35,577	\$35,577
<b>Total Costs (Except Land and Overhead/Profit)</b>		\$122,428	\$143,031	\$153,531	\$184,436
<b>Land Costs</b>	\$15,742 /DU	\$15,742	\$15,742	\$15,742	\$15,742
<b>Dev. Fee/Profit &amp; Overhead</b>	16%	\$26,318	\$30,243	\$32,242	\$38,129
<b>Total Project Costs</b>		\$164,488	\$189,016	\$201,515	\$238,307

(1) Assumes efficiency ratio (net/gross SF) of: 90%  
Source: David Paul Rosen & Associates.

**Table A-26**  
**PER UNIT PROTOTYPE DEVELOPMENT COSTS BY BEDROOM COUNT**  
**OWNER PROTOTYPE #4**  
**CITY OF LONG BEACH**

Prototype Description: Total Number of Units:	Type I High-Rise Condos 100 Units	TYPE AND SIZE OF UNIT				
		Loft 800 Net S.F. 941 Total S.F. (1)	1BD/1BA 800 Net S.F. 941 Total S.F. (1)	2BD/1BA 1,000 Net S.F. 1,176 Total S.F. (1)	2BD/2BA 1,100 Net S.F. 1,294 Total S.F. (1)	3BD/2BA 1,400 Net S.F. 1,647 Total S.F. (1)
<b>Hard Construction Costs</b>						
Site Improvements	\$2,614 /DU	\$2,614	\$2,614	\$2,614	\$2,614	\$2,614
Unit/Parking Constr. Costs	\$157.60 /Gr. S.F.	\$148,331	\$148,331	\$185,414	\$203,955	\$259,580
<b>Total Hard Costs</b>		\$150,945	\$150,945	\$188,028	\$206,569	\$262,193
<b>Building Permit, School and Sewer Fees</b>						
Building Permit	\$1.54/ Net S.F.	\$1,232	\$1,232	\$1,540	\$1,694	\$2,156
School Fees	\$2.14/ Net S.F.	\$1,712	\$1,712	\$2,140	\$2,354	\$2,996
Sewer Fees		\$727	\$727	\$727	\$925	\$925
<b>Subtotal</b>		\$3,671	\$3,671	\$4,407	\$4,973	\$6,077
<b>Other Fees and Indirect/Soft Costs</b>						
	\$55,852 /DU	\$55,852	\$55,852	\$55,852	\$55,852	\$55,852
<b>Total Costs (Except Land and Overhead/Profit)</b>		\$210,468	\$210,468	\$248,287	\$267,395	\$324,123
<b>Land Costs</b>						
	\$11,086 /DU	\$11,086	\$11,086	\$11,086	\$11,086	\$11,086
<b>Dev. Fee/Profit &amp; Overhead</b>						
	16%	\$42,201	\$42,201	\$49,404	\$53,044	\$63,849
<b>Total Project Costs</b>		\$263,755	\$263,755	\$308,778	\$331,525	\$399,058

(1) Assumes efficiency ratio (net/gross SF) of: 85%  
Plus pro rata (per unit) share of 0 of common space.



**Table A-27**  
**Rent, Utility Allowance and Affordable Rent Assumptions**  
**Long Beach Inclusionary Housing Analysis**

**Assumptions**

Affordable Housing Cost As a % of Income 30%

	<b>Loft/ 1 Bedroom</b>	<b>2 Bedroom</b>	<b>3 Bedroom</b>	<b>4 Bedroom</b>
No. of Bedrooms	2 Persons	4 Persons	6 Persons	8 Persons
Household Size (Health and Safety)	2 Persons	4 Persons	6 Persons	8 Persons
Household Size Income Adjust. Factor	80%	100%	116%	132%
Renter Utility Allowance, Long Beach (1)	\$55	\$79	\$107	\$126

**Affordable Rents by Income Level**

	<b>Loft/ 1 Bedroom</b>	<b>2 Bedroom</b>	<b>3 Bedroom</b>	<b>4 Bedroom</b>
<u>45% of Median</u>				
Annual Income Limit	\$20,304	\$25,380	\$29,441	\$33,502
Affordable Monthly Housing Cost	\$508	\$635	\$736	\$838
Less: Monthly Utility Allowance	(\$55)	(\$79)	(\$107)	(\$126)
Affordable Monthly Rent	\$453	\$556	\$629	\$712

<u>60% of Median</u>				
Annual Income Limit	\$27,072	\$33,840	\$39,254	\$44,669
Affordable Monthly Housing Cost	\$677	\$846	\$981	\$1,117
Less: Monthly Utility Allowance	(\$55)	(\$79)	(\$107)	(\$126)
Affordable Monthly Rent	\$622	\$767	\$874	\$991

	<b>Loft/ 1 Bedroom</b>	<b>2 Bedroom</b>	<b>3 Bedroom</b>	<b>4 Bedroom</b>
<b>Summary of Affordable Rents</b>				
45% of Median	\$453	\$556	\$629	\$712
60% of Median	\$622	\$767	\$874	\$991

(1) Source: Long Beach Housing Authority, effective 6/3/02. Includes natural gas cooking, heating and water heating plus basic electricity for renters.

Source: David Paul Rosen & Associates

**Table A-28**  
**Affordable Mortgage By Income Level**  
**Owner Housing Prototypes**  
**Long Beach Inclusionary Housing Analysis**  
**2003**

**ASSUMPTIONS**

Affordable Housing Cost As a % of Income			35%
	<b>Loft/</b>		
No. of Bedrooms	<b>1 Bedroom</b>	<b>2 Bedroom</b>	<b>3 Bedroom</b>
Household Size, Health and Safety Code	2 Persons	4 Persons	6 Persons
Household Size Income Adjust. Factor, Tax Credits	80%	100%	116%
Owner Utility Allowance (1)	\$84	\$116	\$150
Monthly HOA Fee/Maint. Cost	\$100		
Monthly Property Insurance	\$50		
Property Tax Rate	1.25%		
Mortgage Interest Rate	7.50%		
Term (Years)	30		

**AFFORDABLE HOUSING PAYMENT (PITI)**

		<b>Loft/</b>		
		<b>1 Bedroom</b>	<b>2 Bedroom</b>	<b>3 Bedroom</b>
<u>90% AMI</u>				
Annual Income Limit		\$39,672	\$49,590	\$57,524
Affordable Monthly Housing Cost		\$1,157	\$1,446	\$1,678
Less: Monthly Utility Allowance (1)		(\$84)	(\$116)	(\$150)
Less: HOA/Maintenance Expense		(\$100)	(\$100)	(\$100)
Less: Property Insurance		(\$50)	(\$50)	(\$50)
Available for Principal, Interest, Taxes		\$923	\$1,180	\$1,378
Less: Property Taxes (2)	1.20%	\$147	\$188	\$219
Supportable Mortgage Before Prop. Taxes		\$132,005	\$168,761	\$197,078
Assumed Assessed Value at Sale	90.00%	\$146,673	\$187,512	\$218,976
Available for Mortg. Principal and Interest		\$776	\$992	\$1,159
Supportable Mortgage		\$111,029	\$141,943	\$165,761
<u>110% AMI</u>				
Annual Income Limit		\$48,488	\$60,610	\$70,308
Affordable Monthly Housing Cost		\$1,414	\$1,768	\$2,051
Less: Monthly Utility Allowance (1)		(\$84)	(\$116)	(\$150)
Less: HOA/Maintenance Expense		(\$100)	(\$100)	(\$100)
Less: Property Insurance		(\$50)	(\$50)	(\$50)
Available for Principal, Interest, Taxes		\$1,180	\$1,502	\$1,751
Less: Property Taxes (2)	1.20%	\$188	\$239	\$278
Supportable Mortgage		\$168,761	\$214,812	\$250,424
Assumed Assessed Value at Sale	90.00%	\$187,512	\$238,681	\$278,249
Available for Mortg. Principal and Interest		\$992	\$1,263	\$1,473
Supportable Mortgage		\$141,943	\$180,677	\$210,629

- (1) Source: Long Beach Housing Authority, effective 6/3/02. Includes natural gas cooking, heating and water heating, basic electricity, trash water and sewer for owners.
- (2) Calculated based on assessed value equal to affordable mortgage plus 10% downpayment.
- Source: David Paul Rosen & Associates.

**Table A-29**  
**Inclusionary Units by Income Level**  
**Inclusionary Alternative 1: 10% of Units Affordable at 45% of Area Median Income**  
**Rental Housing Prototypes**

<b>Prototype</b>		<b>Renter 1</b>	<b>Renter 2</b>
		<b>Townhomes</b>	<b>Type V Stacked Flats Apartments</b>
<b><u>Units by BR Count</u></b>	<b>Total</b>		
Loft		22	50
One Bedroom		0	0
Two Bedroom/1 Bath		4	7
Two Bedroom/2 Bath		3	8
Three Bedroom		11	25
Manager's		4	10
		0	0
<b><u>Units by BR Count and Income Level</u></b>			
<b>45% of Median</b>	<b>10.00%</b>	2	5
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	2
Three Bedroom		0	1
<b>60% of Median</b>	<b>0.00%</b>	0	0
Loft		0	0
One Bedroom		0	0
Two Bedroom/1 Bath		0	0
Two Bedroom/2 Bath		0	0
Three Bedroom		0	0
<b><u>Total Affordable Units</u></b>	<b>10.00%</b>	2	5
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	2
Three Bedroom		0	1
<b><u>Market</u></b>	<b>90.00%</b>	20	45
Loft		0	0
One Bedroom		3	6
Two Bedroom/1 Bath		3	7
Two Bedroom/2 Bath		10	23
Three Bedroom		4	9

Source: David Paul Rosen & Associates

**Table A-30**  
**Inclusionary Units by Income Level**  
**Inclusionary Alternative 2: 10% of Units Affordable at 60% of Area Median Inco**  
**Rental Housing Prototypes**

<b>Prototype</b>		Renter 1	Renter 2
		Townhomes	Type V Stacked Flats Apartments
<b><u>Units by BR Count</u></b>	<b>Total</b>	22	50
Loft		0	0
One Bedroom		4	7
Two Bedroom/1 Bath		3	8
Two Bedroom/2 Bath		11	25
Three Bedroom		4	10
Manager's		0	0
<b><u>Units by BR Count and Income Level</u></b>			
<b>45% of Median</b>	<b>0.00%</b>	0	0
Loft		0	0
One Bedroom		0	0
Two Bedroom/1 Bath		0	0
Two Bedroom/2 Bath		0	0
Three Bedroom		0	0
<b>60% of Median</b>	<b>10.00%</b>	2	5
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	2
Three Bedroom		0	1
<b><u>Total Affordable Units</u></b>	<b>10.00%</b>	2	5
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	2
Three Bedroom		0	1
<b><u>Market</u></b>	<b>90.00%</b>	20	45
Loft		0	0
One Bedroom		3	6
Two Bedroom/1 Bath		3	7
Two Bedroom/2 Bath		10	23
Three Bedroom		4	9

Source: David Paul Rosen & Associates

**Table A-31**  
**Inclusionary Units by Income Level**  
**Inclusionary Alternative 3: 15% of Units Affordable at 60% of Area Median Income**  
**Rental Housing Prototypes**

		Renter 1	Renter 2
<b>Prototype</b>		Townhomes	Type V Stacked Flats Apartments
<b>Units by BR Count</b>	<b>Total</b>	22	50
Loft		0	0
One Bedroom		4	7
Two Bedroom/1 Bath		3	8
Two Bedroom/2 Bath		11	25
Three Bedroom		4	10
Manager's		0	0
<b>Units by BR Count and Income Level</b>			
<b>45% of Median</b>	<b>0.00%</b>	0	0
Loft		0	0
One Bedroom		0	0
Two Bedroom/1 Bath		0	0
Two Bedroom/2 Bath		0	0
Three Bedroom		0	0
<b>60% of Median</b>	<b>15.00%</b>	3	7
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	3
Three Bedroom		1	2
<b>Total Affordable Units</b>	<b>15.00%</b>	3	7
Loft		0	0
One Bedroom		1	1
Two Bedroom/1 Bath		0	1
Two Bedroom/2 Bath		1	3
Three Bedroom		1	2
<b>Market</b>	<b>85.00%</b>	19	43
Loft		0	0
One Bedroom		3	6
Two Bedroom/1 Bath		3	7
Two Bedroom/2 Bath		10	22
Three Bedroom		3	8

Source: David Paul Rosen & Associates

**Table A-32**  
**Net Operating Income: Affordable Units**  
**Inclusionary Alternative 1: 10% of Units Affordable at 45% of Area Median Income**  
**Rental Housing Prototypes**

<b>Prototype</b>	<b>Renter 1</b>	<b>Renter 2</b>
	<b>Townhomes</b>	<b>Type V Stacked Flats Apartments</b>
<b><u>Annual Gross Rent--Aff. Units</u></b>		
<b>45% of Median</b>		
Loft \$453	\$0	\$0
One Bedroom \$453	\$5,436	\$5,436
Two Bedroom \$556	\$6,672	\$20,016
Three Bedroom \$629	\$0	\$7,548
<b>60% of Median</b>		
Loft \$622	\$0	\$0
One Bedroom \$622	\$0	\$0
Two Bedroom \$767	\$0	\$0
Three Bedroom \$874	\$0	\$0
<b><u>Effective Gross Income--Afford. Units</u></b>	\$12,108	\$33,000
<b>Less: Vacancy Allowance 3.00%</b>	\$363	\$990
<b>Less: Operating Expenses (1)</b>	\$5,200	\$13,000
<b>Less: Property Taxes (2)</b>	\$2,410	\$5,885
<b>Less: Replacement Reserves (3)</b>	\$500	\$1,250
<b>NOI Available for Debt Service</b>	<b>\$3,635</b>	<b>\$11,875</b>
<b>(1) Annual Operating Cost Per Unit</b>	\$2,600	\$2,600
<b>(2) Annual Property Taxes</b>	\$1,205	\$1,177
<b>% of Total Dev. Value: 1.20%</b>		
<b>(3) Annual Replace. Reserve per Unit</b>	\$250	\$250
<b>Total Operating Costs/Reserves</b>	\$4,055	\$4,027

Source: Institute of Real Estate Management; David Paul Rosen & Associates

**Table A-33**  
**Net Operating Income: Affordable Units**  
**Inclusionary Alternative 2: 10% of Units Affordable at 60% of Area Median Income**  
**Rental Housing Prototypes**

Prototype	Renter 1  Townhomes	Renter 2  Type V Stacked Flats Apartments
<b><u>Annual Gross Rent--Aff. Units</u></b>		
<b>45% of Median</b>		
Loft \$453	\$0	\$0
One Bedroom \$453	\$0	\$0
Two Bedroom \$556	\$0	\$0
Three Bedroom \$629	\$0	\$0
<b>60% of Median</b>		
Loft \$622	\$0	\$0
One Bedroom \$622	\$7,464	\$7,464
Two Bedroom \$767	\$9,204	\$27,612
Three Bedroom \$874	\$0	\$10,488
<b><u>Effective Gross Income--Afford. Units</u></b>	\$16,668	\$45,564
Less: Vacancy Allowance 3.00%	\$500	\$1,367
Less: Operating Expenses (1)	\$5,200	\$13,000
Less: Property Taxes (2)	\$2,410	\$5,885
Less: Replacement Reserves (3)	\$500	\$1,250
<b>NOI Available for Debt Service</b>	<b>\$8,058</b>	<b>\$24,062</b>
<b>(1) Annual Operating Cost Per Unit</b>	\$2,600	\$2,600
<b>(2) Annual Property Taxes</b>	\$1,205	\$1,177
% of Total Dev. Value: 1.20%		
<b>(3) Annual Replace. Reserve per Unit</b>	\$250	\$250
% of Hard Constr. Cost: 0.40%		
<b>Total Annual Cost Per Unit</b>	<b>\$4,055</b>	<b>\$4,027</b>

Source: Institute of Real Estate Management; David Paul Rosen & Associates

**Table A-34**  
**Net Operating Income: Affordable Units**  
**Inclusionary Alternative 3: 15% of Units Affordable at 60% of Area Median Income**  
**Rental Housing Prototypes**

<b>Prototype</b>	<b>Renter 1</b>	<b>Renter 2</b>
	<b>Townhomes</b>	<b>Type V Stacked Flats Apartments</b>
<b><u>Annual Gross Rent--Aff. Units</u></b>		
<b>45% of AMI</b>		
Loft \$453	\$0	\$0
One Bedroom \$453	\$0	\$0
Two Bedroom \$556	\$0	\$0
Three Bedroom \$629	\$0	\$0
<b>60% of AMI</b>		
Loft \$622	\$0	\$0
One Bedroom \$622	\$7,464	\$7,464
Two Bedroom \$767	\$9,204	\$36,816
Three Bedroom \$874	\$10,488	\$20,976
<b><u>Effective Gross Income--Afford. Units</u></b>	<b>\$27,156</b>	<b>\$65,256</b>
<b>Less: Vacancy Allowance 3.00%</b>	\$815	\$1,958
<b>Less: Operating Expenses (1)</b>	\$7,800	\$18,200
<b>Less: Property Taxes (2)</b>	\$3,615	\$8,239
<b>Less: Replacement Reserves (3)</b>	\$750	\$1,750
<b>NOI Available for Debt Service</b>	<b>\$14,176</b>	<b>\$35,109</b>
<b>(1) Annual Operating Cost Per Unit</b>	<b>\$2,600</b>	<b>\$2,600</b>
<b>(2) Annual Property Taxes</b>	<b>\$1,205</b>	<b>\$1,177</b>
% of Total Dev. Value: 1.20%		
<b>(3) Annual Replace. Reserve per Unit</b>	<b>\$250</b>	<b>\$250</b>
% of Hard Constr. Cost 0.40%		
<b>Total Operating Costs/Reserves</b>	<b>\$4,055</b>	<b>\$4,027</b>

Source: Institute of Real Estate Management; David Paul Rosen & Associates



**Table A-35**  
**Development Costs for Inclusionary Units**  
**Inclusionary Alternative 1: 10% of Units Affordable at 45% of Area Median Income**  
**Rental Housing Prototypes**

	Renter 1	Renter 2
<b>Prototype</b>	Townhomes	Type V Stacked Flats Apartments
<b>Total Affordable Units</b>	2	5
One Bedroom	1	1
Two Bedroom/1 Bath	0	1
Two Bedroom/2 Bath	1	2
Three Bedroom	0	1
<b>Per Unit Development Cost</b>		
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$193,113	\$161,154
Two Bedroom/2 Bath	\$202,133	\$166,875
Three Bedroom	\$215,414	\$177,844
<b>Total Development Costs, Aff. Units</b>	\$388,784	\$817,448
Loft	\$0	\$0
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$0	\$161,154
Two Bedroom/2 Bath	\$202,133	\$333,750
Three Bedroom	\$0	\$177,844

Source: David Paul Rosen & Associates

**Table A-36**  
**Development Costs for Inclusionary Units**  
**Inclusionary Alternative 2: 10% of Units Affordable at 60% of Area Median Income**  
**Rental Housing Prototypes**

<b>Prototype</b>	Renter 1	Renter 2
	Townhomes	Type V Stacked Flats Apartments
<b>Total Affordable Units</b>	2	5
Loft	0	0
One Bedroom	1	1
Two Bedroom/1 Bath	0	1
Two Bedroom/2 Bath	1	2
Three Bedroom	0	1
<b>Per Unit Development Cost</b>		
Loft	\$0	\$0
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$193,113	\$161,154
Two Bedroom/2 Bath	\$202,133	\$166,875
Three Bedroom	\$215,414	\$177,844
<b>Total Development Costs, Aff. Units</b>	\$388,784	\$817,448
Loft	\$0	\$0
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$0	\$161,154
Two Bedroom/2 Bath	\$202,133	\$333,750
Three Bedroom	\$0	\$177,844

Source: David Paul Rosen & Associates

**Table A-37**  
**Development Costs for Inclusionary Units**  
**Inclusionary Alternative 3: 15% of Units Affordable at 60% of Area Median Income**  
**Rental Housing Prototypes**

	Renter 1	Renter 2
<b>Prototype</b>	Townhomes	Type V Stacked Flats Apartments
<b>Total Affordable Units</b>	3	7
Loft	0	0
One Bedroom	1	1
Two Bedroom/1 Bath	0	1
Two Bedroom/2 Bath	1	3
Three Bedroom	1	2
<b>Per Unit Development Cost</b>		
Loft	\$0	\$0
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$186,651	\$161,154
Two Bedroom/2 Bath	\$186,651	\$166,875
Three Bedroom	\$215,414	\$177,844
<b>Total Development Costs, Aff. Units</b>	\$588,716	\$1,162,167
Loft	\$0	\$0
One Bedroom	\$186,651	\$144,700
Two Bedroom/1 Bath	\$0	\$161,154
Two Bedroom/2 Bath	\$186,651	\$500,625
Three Bedroom	\$215,414	\$355,688

Source: David Paul Rosen & Associates

**Table A-38**  
**Inclusionary Units by Income Level**  
**Inclusionary Scenario 1: 10% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

<b>Prototype</b>		Owner 1	Owner 2	Owner 3	Owner 4
		Small Lot S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High- Rise Condos
<b>Units by BR Count</b>	<b>Total</b>	10	22	50	100
Lofts		0	0	0	10
One Bedroom		0	0	7	10
Two Bedroom/1 Bath		0	13	8	10
Two Bedroom/2 Bath		4	0	25	50
Three Bedroom		6	9	10	20
<b>90% of Median</b>	<b>10.00%</b>	1	2	5	10
Lofts		0	0	0	1
One Bedroom		0	0	1	1
Two Bedroom/1 Bath		0	1	1	1
Two Bedroom/2 Bath		0	0	2	5
Three Bedroom		1	1	1	2
<b>Market</b>		90%	91%	90%	90%
Lofts		0	0	0	9
One Bedroom		0	0	6	9
Two Bedroom/1 Bath		0	12	7	9
Two Bedroom/2 Bath		4	0	23	45
Three Bedroom		5	8	9	18
<b>Total</b>		9	20	45	90

Source: David Paul Rosen & Associates.

**Table A-39**  
**Inclusionary Units by Income Level**  
**Inclusionary Scenario 2: 15% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

Prototype		Owner 1 S-F Detached	Owner 2 Townhomes	Owner 3 Type V Stacked Flat Condos	Owner 4 Type I High- Rise Condos
<b>Units by BR Count</b>	<b>Total</b>	10	22	50	100
Lofts		0	0	0	10
One Bedroom		0	0	7	10
Two Bedroom/1 Bath		0	13	8	10
Two Bedroom/2 Bath		4	0	25	50
Three Bedroom		6	9	10	20
<b>90% of Median</b>	<b>15.00%</b>	1	3	7	15
Lofts		0	0	0	2
One Bedroom		0	0	1	2
Two Bedroom/1 Bath		0	2	1	2
Two Bedroom/2 Bath		0	0	4	7
Three Bedroom		1	1	1	2
<b>Market</b>		90%	86%	86%	85%
Lofts		0	0	0	8
One Bedroom		0	0	6	8
Two Bedroom/1 Bath		0	11	7	8
Two Bedroom/2 Bath		4	0	21	43
Three Bedroom		5	8	9	18
<b>Total</b>		9	19	43	85

Source: David Paul Rosen & Associates.

**Table A-40**  
**Inclusionary Units by Income Level**  
**Inclusionary Scenario 3: 20% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

<b>Prototype</b>		<b>Owner 1</b>	<b>Owner 2</b>	<b>Owner 3</b>	<b>Owner 4</b>
		<b>S-F Detached</b>	<b>Townhomes</b>	<b>Type V Stacked Flat Condos</b>	<b>Type I High- Rise Condos</b>
<b>Units by BR Count</b>	<b>Total</b>	10	22	50	100
Lofts		0	0	0	10
One Bedroom		0	0	7	10
Two Bedroom/1 Bath		0	13	8	10
Two Bedroom/2 Bath		4	0	25	50
Three Bedroom		6	9	10	20
<b>90% of Median</b>	<b>20.00%</b>	2	4	10	20
Lofts		0	0	0	2
One Bedroom		0	0	1	2
Two Bedroom/1 Bath		0	3	2	2
Two Bedroom/2 Bath		1	0	5	10
Three Bedroom		1	1	2	4
<b>Market</b>		80%	82%	80%	80%
Lofts		0	0	0	8
One Bedroom		0	0	6	8
Two Bedroom/1 Bath		0	10	6	8
Two Bedroom/2 Bath		3	0	20	40
Three Bedroom		5	8	8	16
<b>Total</b>		8	18	40	80

Source: David Paul Rosen & Associates.

**Table A-41**  
**Total Supportable Debt: Inclusionary Units**  
**Inclusionary Scenario 1: 10% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

Prototype		Owner 1 Small Lot S-F Detached	Owner 2 Townhomes	Owner 3 Type V Stacked Flat Condos	Owner 4 Type I High- Rise Condos
Per Unit Mortgage					
<b>90% AMI</b>					
Lofts	\$111,029	\$0	\$0	\$0	\$111,029
One Bedroom	\$111,029	\$0	\$0	\$111,029	\$111,029
Two Bedroom/1 Bath	\$141,943	\$0	\$141,943	\$141,943	\$141,943
Two Bedroom/2 Bath	\$141,943	\$0	\$0	\$283,887	\$709,716
Three Bedroom	\$165,761	\$165,761	\$165,761	\$165,761	\$331,522
<b>Total</b>		<u>\$165,761</u>	<u>\$307,704</u>	<u>\$702,619</u>	<u>\$1,405,238</u>
<b>110% AMI</b>					
Lofts	\$141,943	\$0	\$0	\$0	\$0
One Bedroom	\$141,943	\$0	\$0	\$0	\$0
Two Bedroom/1 Bath	\$180,677	\$0	\$0	\$0	\$0
Two Bedroom/2 Bath	\$180,677	\$0	\$0	\$0	\$0
Three Bedroom	\$210,629	\$0	\$0	\$0	\$0
<b>Total</b>		<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total Affordable Units</b>					
Lofts		\$0	\$0	\$0	\$111,029
One Bedroom		\$0	\$0	\$111,029	\$111,029
Two Bedroom/1 Bath		\$0	\$141,943	\$141,943	\$141,943
Two Bedroom/2 Bath		\$0	\$0	\$283,887	\$709,716
Three Bedroom		\$165,761	\$165,761	\$165,761	\$331,522
<b>Total</b>		<u>\$165,761</u>	<u>\$307,704</u>	<u>\$702,619</u>	<u>\$1,405,238</u>

Source: David Paul Rosen & Associates.

**Table A-42**  
**Total Supportable Debt: Inclusionary Units**  
**Inclusionary Scenario 2: 15% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

Prototype		Owner 1	Owner 2	Owner 3	Owner 4
		S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High-Rise Condos
Per Unit Mortgage					
<b>90% AMI</b>					
Lofts	\$111,029	\$0	\$0	\$0	\$222,057
One Bedroom	\$111,029	\$0	\$0	\$111,029	\$222,057
Two Bedroom/1 Bath	\$141,943	\$0	\$283,887	\$141,943	\$283,887
Two Bedroom/2 Bath	\$141,943	\$0	\$0	\$567,773	\$993,603
Three Bedroom	\$165,761	\$165,761	\$165,761	\$165,761	\$331,522
<b>Total</b>		<u>\$165,761</u>	<u>\$449,647</u>	<u>\$986,506</u>	<u>\$2,053,125</u>
<b>110% AMI</b>					
Lofts	\$141,943	\$0	\$0	\$0	\$0
One Bedroom	\$141,943	\$0	\$0	\$0	\$0
Two Bedroom/1 Bath	\$180,677	\$0	\$0	\$0	\$0
Two Bedroom/2 Bath	\$180,677	\$0	\$0	\$0	\$0
Three Bedroom	\$210,629	\$0	\$0	\$0	\$0
<b>Total</b>		<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total Affordable Units</b>					
Lofts		\$0	\$0	\$0	\$222,057
One Bedroom		\$0	\$0	\$111,029	\$222,057
Two Bedroom/1 Bath		\$0	\$283,887	\$141,943	\$283,887
Two Bedroom/2 Bath		\$0	\$0	\$567,773	\$993,603
Three Bedroom		\$165,761	\$165,761	\$165,761	\$331,522
<b>Total</b>		<u>\$165,761</u>	<u>\$449,647</u>	<u>\$986,506</u>	<u>\$2,053,125</u>

Source: David Paul Rosen & Associates.



**Table A-43**  
**Total Supportable Debt: Inclusionary Units**  
**Inclusionary Scenario 3: 20% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

		Owner 1	Owner 2	Owner 3	Owner 4
Prototype		S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High-Rise Condos
Per Unit Mortgage					
<u>90% AMI</u>					
Lofts	\$111,029	\$0	\$0	\$0	\$222,057
One Bedroom	\$111,029	\$0	\$0	\$111,029	\$222,057
Two Bedroom/1 Bath	\$141,943	\$0	\$425,830	\$283,887	\$283,887
Two Bedroom/2 Bath	\$141,943	\$141,943	\$0	\$709,716	\$1,419,433
Three Bedroom	\$165,761	\$165,761	\$165,761	\$331,522	\$663,044
Total		\$307,704	\$591,591	\$1,436,153	\$2,810,477
<u>110% AMI</u>					
Lofts	\$141,943	\$0	\$0	\$0	\$0
One Bedroom	\$141,943	\$0	\$0	\$0	\$0
Two Bedroom/1 Bath	\$180,677	\$0	\$0	\$0	\$0
Two Bedroom/2 Bath	\$180,677	\$0	\$0	\$0	\$0
Three Bedroom	\$210,629	\$0	\$0	\$0	\$0
Total		\$0	\$0	\$0	\$0
Total Affordable Units					
Lofts		\$0	\$0	\$0	\$222,057
One Bedroom		\$0	\$0	\$111,029	\$222,057
Two Bedroom/1 Bath		\$0	\$425,830	\$283,887	\$283,887
Two Bedroom/2 Bath		\$141,943	\$0	\$709,716	\$1,419,433
Three Bedroom		\$165,761	\$165,761	\$331,522	\$663,044
Total		\$307,704	\$591,591	\$1,436,153	\$2,810,477

Source: David Paul Rosen & Associates.

**Table A-44**  
**Development Costs for Inclusionary Units**  
**Inclusionary Scenario 1: 10% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

	Owner 1	Owner 2	Owner 3	Owner 4
<b>Prototype</b>	S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High- Rise Condos
<b>Total Affordable Units</b>	1	2	5	10
Lofts	0	0	0	1
One Bedroom	0	0	1	1
Two Bedroom/1 Bath	0	1	1	1
Two Bedroom/2 Bath	0	0	2	5
Three Bedroom	1	1	1	2
<b>Per Unit Development Cost</b>				
Lofts	\$0	\$0	\$0	\$263,755
One Bedroom	\$0	\$0	\$164,488	\$263,755
Two Bedroom/1 Bath	\$0	\$234,558	\$189,016	\$308,778
Two Bedroom/2 Bath	\$264,831	\$0	\$201,515	\$331,525
Three Bedroom	\$279,605	\$256,618	\$238,307	\$399,058
<b>Total Development Costs, Aff. Units</b>	\$279,605	\$491,176	\$994,841	\$3,292,029
Lofts	\$0	\$0	\$0	\$263,755
One Bedroom	\$0	\$0	\$164,488	\$263,755
Two Bedroom/1 Bath	\$0	\$234,558	\$189,016	\$308,778
Two Bedroom/2 Bath	\$0	\$0	\$403,030	\$1,657,624
Three Bedroom	\$279,605	\$256,618	\$238,307	\$798,117

Source: David Paul Rosen & Associates.

**Table A-45**  
**Development Costs for Inclusionary Units**  
**Inclusionary Scenario 2: 15% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

	Owner 1	Owner 2	Owner 3	Owner 4
<b>Prototype</b>	S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High- Rise Condos
<b>Total Affordable Units</b>	1	3	7	15
Lofts	0	0	0	2
One Bedroom	0	0	1	2
Two Bedroom/1 Bath	0	2	1	2
Two Bedroom/2 Bath	0	0	4	7
Three Bedroom	1	1	1	2
<b>Per Unit Development Cost</b>				
Lofts	\$0	\$0	\$0	\$263,755
One Bedroom	\$0	\$0	\$164,488	\$263,755
Two Bedroom/1 Bath	\$0	\$234,558	\$189,016	\$308,778
Two Bedroom/2 Bath	\$264,831	\$0	\$201,515	\$331,525
Three Bedroom	\$279,605	\$256,618	\$238,307	\$399,058
<b>Total Development Costs, Aff. Units</b>	\$279,605	\$725,734	\$1,397,871	\$4,791,367
Loft	\$0	\$0	\$0	\$527,511
One Bedroom	\$0	\$0	\$164,488	\$527,511
Two Bedroom/1 Bath	\$0	\$469,116	\$189,016	\$617,556
Two Bedroom/2 Bath	\$0	\$0	\$806,060	\$2,320,673
Three Bedroom	\$279,605	\$256,618	\$238,307	\$798,117

Source: David Paul Rosen & Associates.

**Table A-46**  
**Development Costs for Inclusionary Units**  
**Inclusionary Scenario 3: 20% of Units Affordable at 90% of Area Median Income**  
**Owner Housing Prototypes**

	Owner 1	Owner 2	Owner 3	Owner 4
<b>Prototype</b>	S-F Detached	Townhomes	Type V Stacked Flat Condos	Type I High- Rise Condos
<b>Total Affordable Units</b>	2	4	10	20
Lofts	0	0	0	2
One Bedroom	0	0	1	2
Two Bedroom/1 Bath	0	3	2	2
Two Bedroom/2 Bath	1	0	5	10
Three Bedroom	1	1	2	4
<b>Per Unit Development Cost</b>				
Lofts	\$0	\$0	\$0	\$263,755
One Bedroom	\$0	\$0	\$164,488	\$263,755
Two Bedroom/1 Bath	\$0	\$234,558	\$189,016	\$308,778
Two Bedroom/2 Bath	\$264,831	\$0	\$201,515	\$331,525
Three Bedroom	\$279,605	\$256,618	\$238,307	\$399,058
<b>Total Development Costs, Aff. Units</b>	\$544,436	\$960,292	\$2,026,709	\$6,584,057
Lofts	\$0	\$0	\$0	\$527,511
One Bedroom	\$0	\$0	\$164,488	\$527,511
Two Bedroom/1 Bath	\$0	\$703,674	\$378,032	\$617,556
Two Bedroom/2 Bath	\$264,831	\$0	\$1,007,575	\$3,315,247
Three Bedroom	\$279,605	\$256,618	\$476,614	\$1,596,234

Source: David Paul Rosen & Associates.